

The Resonator

Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club

Volume 6, Number 6

www.FairLawnARC.org

June 2021

From The President

I have to start by saying **THANK YOU**.

Our First Annual FLARC Hamfest was a huge success. Once again, in FLARC style, we had an event that was enjoyed by all. We were able to have support from near and far, old members and new... We all had the opportunity to make this a wonderful event and it happened.

I was able to walk around the venue and speak with many of our vendors and visitors, and they expressed their happiness of being out again and socializing once more with fellow hams, friends they hadn't seen in a while.

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Member Profile

Name: Noel Spears Callsign: N2OEL

My Novice ticket was issued on December 20, 1983 with the call KA2TSL. About three months later, I took the General exam at the FCC field office in New York City. I passed and was then issued the Technician call of N2FAV. For the next 11 years, I was only active on 2M mobile.

In the year 2000, I upgraded to General, and kept the call N2FAV, which I held to February 2007. In February of 2007, I upgraded again to Extra and changed my call to the vanity call of N2OEL. My deceased wife was Elizabeth, KB2CJD.

In the early to mid-1980s, I had a ham radio related side business. I would purchase the used junk from several local RadioShack stores for resale at hamfests. Some of you may remember my unique purchase guarantee. Everything was "Guaranteed Defective" -- if for any reason an item that you purchased from us is not defective, you may return it for a full refund of your purchase price.

In Ridgefield Park, I lived from 1979 through May of 1999 on the third floor of a four story apartment house. I was finally able to reach the local repeaters when in 1985, Marty Barry W2KIP, helped me install a 2M IsoPole antenna on the roof. We used an air shaft to run the coax to the roof, and a six gauge grounding wire to the basement.

I lived in Maywood, New Jersey from 1999 through the end of 2015. As of January 1, 2016, I legally became a Florida resident.

I was active with the Red Cross in Hackensack from about 1990 through 2010. I regularly reported to the Hackensack office to activate the station for the monthly nets. On April 16, 2007, my wife (a CPA) and I were about to celebrate the end of tax season with a splendid evening out to dinner. Our trip was interrupted when I was called out for my first actual

FLARC To Hold VE Testing On June 19th at INDOOR LOCATION

On June 19, 2021 Fair Lawn Amateur Radio Club will continue amateur radio test sessions on a trial basis. These sessions will be held indoors.

The location is at:

The Masonic Lodge 99 S Maple Avenue Ridgewood, NJ

NOTE THAT THIS IS AN INDOOR LOCATION!

Covid-19 related incidents will cancel testing.

Prior to Testing:

Send an email to wo2w@arrl.net requesting to book your spot. Pre-registration is REQUIRED.

Please Bring With You:

- You MUST bring and WEAR personal PPE items including a face mask
- 2 pens and 2 pencils. None will be provided to you due to possible virus transmission
- Your FRN number, and (if licensed) a copy of your ham license or a valid CSCE (Certificate of Successful Completion Exam)
- A completed Form 605 (which will be sent to you ahead of your test session, along with your assigned test time.)
- Additionally, the \$15.00 exam fee. This is payable in cash (exact amount is a must)
- 3 copies of the CSCE form which will be sent to you ahead of your test session

Additional scheduled testing dates are: June 12, 2021 and July 10, 2021.

FLARC is following government Covid-19 guidance closely and all events will adhere accordingly to the latest advice.

The FLARC Hamfest Is June 5, 2021

By the time you receive this (unless it rains), the club will have held its first hamfest ever at the Fair Lawn Recycling Center on Saddle River Road on Saturday, June 5th, 2021. (The rain date is June 12).

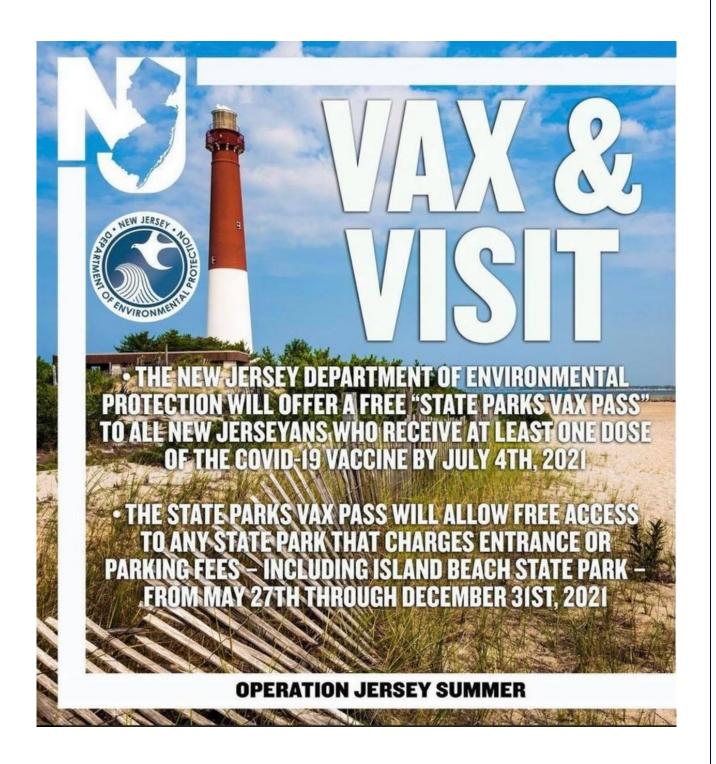
This replaces our last year's Thanksgiving Friday auction, which was cancelled by the Covid-19 virus.

For questions please contact Gene WO2W at wo2w@arrl.net or Visit our website at www.FairLawnARC.org.

FLARC is following government Covid-19 guidance closely and all events will adhere accordingly to the latest advice.







Source: www.mhlw.go.jp

The Club Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

2021 Officers, Committees and Assignments

2021 Officers, Committees and Assignments			
President	Nomar Vizcarrando	NP4H	
Vice President	John L. Howard	W2JLH	
Treasurer	Bruce Kalogera	NJ2BK	
Secretary	Tom McCabe	N2AXX	
Trustee	Ed Efchak	WX2R	
Trustee	Don Cassarini	K2PD	
Trustee	Fred Wawra	W2ABE	
Field Day	Steve Wraga	WA2BYX	
Member Services	Judith Shaw	KC2LTM	
Publicity	Ed Efchak	WX2R	
Publicity	Gene Ottenheimer	WO2W	
Publicity	Judith Shaw	KC2LTM	
Publicity	Susan Frank	W6SKT	
Program	Lowell Vant Slot	W2DLT	
Publicity	Karl Frank	W2KBF	
Publicity	Nomar Vizcarrando (ex officio)	NP4H	
Social Media	Dave Marotti	NK2Q	
Video/YouTube	Thom Guida	W2NZ	
VE Liaison	Gene Ottenheimer	WO2W	
VE Liaison	Pete Senesi	KD2BMX	
Contests	Lowell Vant Slot	W2DLT	
Education	Gordon Beattie	W2TTT	
Education	Randy Smith	WU2S	
Education	John L. Howard	K2JLH	
Education	Fred Wawra	W2ABE	
History	Fred Belghaus	W2AAB	
Health and Welfare	Judith Shaw	KC2LTM	
Photographer	Don Cassarini	N2PRT	
W2NPT Trustee	Paul Cornett	W2IP	
Technical	Paul Cornett	W2IP	
Technical	Randy Smith	WU2S	
Technical	Fred Wawra	W2ABE	
RACES/ARES Director	Dave Gotlib	KD2MOB	
RACES/ARES Liaison	Steve Wraga	WA2BYX	
Newsletter Editor	Ed Efchak	WX2R	
FL Town Liaison	Gene Ottenheimer	WO2W	
Net Scheduler	Brian Cirulnick	KD2KLN	
Quartermaster	Brian Cirulnick	KD2KLN	

Fair Lawn RACES/ARES Corner



Hello fellow ARES members and friends.

The unofficial start to Summer has begun and as the weather is warming up, so are the ARES training sessions / Nets for FL ARES, Bergen County ARES and Passaic County ARES AKA NENJ ARES!!

A very successful ARES / American Red Cross drill took place on May 8th using Winlink for messaging. I would like to personally thank Jim N2JLF, Karl W2KBF and Ed KD2TVZ for their participation.

When using Winlink along with VARA FM, no internet is required, yet you can send messages or forms using a designated frequency (NJ2PC Repeater on a frequency of 146.610 MHz) handing the VARA FM Winlink Radio Message Server - ALØY-3, and we're glad to have use of a VARA FM transmitter located close by at Garret Mountain. Thank you Aly ALØY for providing access to the transmitter.

You may be aware that a new NENJ ARES Net is taking place every Wednesday at 8:00 PM, which is the same time slot and uses the same frequencies as the FL-ARES Net. The new ARES Net combines FL-ARES with Bergen County ARES and Passaic County ARES for one weekly Northeast NJ ARES Net.

It has come to our attention that combining the Nets would provide greater interest (check-ins), more emergency communications discussion and messaging during one timeframe versus three separate dates and times. Sure enough it

Continued on page 5.

Fair Lawn RACES/ARES Corner, cont.

has!! I would like to thank Aly ALØY, Ed KD2TVZ and Jim N2JLF for being the Net Control Operators (NCO) or alternate Net Control Operators (ANCO). We sent practice and live Radiograms over the last month and I would like to thank Aly ALØY and Hank WA2CCN for sending the Radiograms. Job well done!!

I'd like to direct you to a great website which gives us access and information for our training sessions

https://harriscountyares.org/training/training.php

Everything from knowledge based training to safety, weather and messaging is included on this website. When you have the opportunity, please check it out.

Our Nets are open to all amateur radio enthusiasts. Our ARES members, who are volunteers, are able to assist anyone with answers to questions they may have regarding emergency communications.

Also, our Nets include members who are not only a part of Fair Lawn ARES, the nets consist of members from Bergen County ARES, Passaic County ARES, Gloucester County ARES and Wayne County [PA] ARES as well.

Please note the time of the New NENJ NJ ARES Nets (KB2FLA Nets). They are taking place on Wednesdays at 2000 hours on the FLARC and NJ2BS Repeaters. Maybe one day the NJ2PC Repeater will be connected as well. Please join

Fair Lawn RACES/ARES Corner, cont.

us every Wednesday for any updates, messages or activities which may take place. We are on the following Repeaters and Echolink:

The Fair Lawn ARC Repeater info is: RX 145.47 MHz / TX 144.87, PL Tone 167.9 Hz. Echolink W2NPT-R.

The NJ2BS Repeater info is: RX 146.835 MHz / TX 146.235, PL Tone 151.4 Hz. Echolink KD2BKD-L.

FL-ARES would like to thank the FLARC for the use of its repeater as well as the Venture Crew 7373 Club for the use of their repeater. We are fortunate to make Fair Lawn and the surrounding communities our home.

With our leadership and support from the FLARC we can grow and be of assistance in many community events. We are always seeking new members to join FL-ARES. Info on FL-RACES is as follows:

Our next FL-RACES KB2FLR net will take place on Wednesday, June 16th at 2030 hours on the Fair Lawn ARC Repeater as well as the NJ2BS Repeater (frequencies noted above).

Thank you to the Fair Lawn Amateur Radio Club for permitting FL-RACES to use the repeater. FL-RACES is part of several RACES groups which operate within Bergen County and from time to time has training opportunities with Bergen County RACES. We will be the Net Control Operating Station for the BC-RACES Net on May 26, 2021 at 7:45 PM and

Continued on page 66.



Remember You're on Your Own In 2021!

- Send in your club scores!
- Tell us what you did for Field Day!
- Have fun... stay safe!!
- See you in person in 2022!!

2021 FLARC Kawfee Tawk Programs

Date	Presenter	Program
Friday, January 15, 2021	Lauren Libby W0LD	Trans World Radio/Operating A Super Station
Friday, February 19, 2021	Ed Efchak WX2R	The FLARC Member Survey
Friday, March 29, 2021	Otis Vincens NP4G	INDEXA
Friday, March 12, 2021	Dave Snyder KD2TVD	Pico Balloons, Ham Radio, and Seton Hall STEN
Friday, April 16, 2021	Wayne Smith WB2ONZ	Amateur Radio and The Civil Air Patrol
Friday, May 14, 2021	Bob Holstrom KD2BKD	Setting up DUDE-Star for Digital Voice Communications
Friday, May 21, 2021	Roland C Luetzelschwab K9LA	Propagation and Cycle 25
Friday, June 11, 2021	Barry Feiurman K3EUI	Sound Card Digital Modes
Friday, July 16, 2021	Neil Goldstein W2NDG	Raspberry Pi
Friday, August 13, 2021	Charlie Cebula AC2ZU	The Story of Project Diana
Friday, August 20, 2021	Larry Van Horn N5FPW	Listening to Military Aircraft via Satellite
Friday, September 10, 2021	Brian Cirulnick KD2KLN	Setting Up A Solar Powered Station (Tentative)
Friday, September 17, 2021	Clint Bradford K6LCS	How to Work Amateur Satellites with Your HT
Friday, September 24, 2021	Ria Jairam N2RJ	Amateur radio in Trinidad and Tobago
Friday, October 15, 2021	Kent Britain WA5VJB	All You Need To Know About Yagi Antennas
Friday, November 12, 2021	Tom Abazia KB2ESE	Building an SDR Transceiver
Friday, November 19, 2021	Tom Perera W1TP	SPY Radios and CIA Bugs
Friday, December 10, 2021	Bob Antoniuk N2SU	The History of Callsigns
Friday, December 17, 2021	Rich Moseson W2VU	Thoughts About Growing Amateur Radio

Never Miss A Kawfee Tawk...

VISIT THE FLARC YOUTUBE CHANNEL!

http://youtube.FairLawnARC.org

WWW.GIFTS4HAMS.COM

EVERYTHING ENGRAVED FOR THE HAM STATION

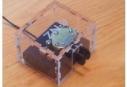


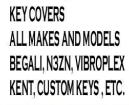
LED SIGNS CLUBS, ORGANIZATIONS & CUSTOM

















LASER ENGRAVED WOOD PLAQUES, CLUBS SHARED SHACK







PLUS MANY MORE ITEMS /



Hidetsugu Yagi's 130th Birthday Google Doodle

SIG Group Participation as of May 23, 2021

Here is an update on the roster of Special Interest Groups...all groups have increased in size during the last month:

32

35

Portable Ops Monitoring DX Satellite

Digital Voice

22 15

Satellite 15 FT8 17

FLARC General 146

Sign up for a group... or ... why not start $% \left(1\right) =\left(1\right) \left(1\right) \left($

one?

Contact webmaster@FairLawnARC.org

Follow FLARC ON THE WEB

Facebook: http://facebook.FairLawnARC.org

Twitter: @FairLawnARC

Blog: http://blog.FairLawnARC.org

Youtube: http://youtube.FairLawnARC.org

Website: http://FairLawnARC.org

The FLARC Hamfest! A First For FLARC... A Fabulous Success...

Fair Lawn Amateur Radio Club

HAMFEST













WAYNE ELECTRONICS LLC









Master Event Calendar

June 5, 2021 The FLARC Hamfest

June 11, 2021 Barry Feiurman K3EUI "Sound Card Digital Modes"

June 13, 2021 The Radburn Street Fair (Tentative)

June 26-27 ARRL Field Day

July TBD

August TBD

September TBD

October TBD

October 17, 2021 The River Road Street Fair (Tentative)

November 19, 2021 Tom Perera W1TP" Spy Radios and CIA Bugs"

December 17, 2021 "An Update on the ARRL"



Beyond FT8

2021 FLARC June 11st "Kawfee Tawk" Series

Barry Feierman K3EUI Discusses

"Beyond FT8: A Basic Overview of Digital Modes And Trade-Off's"

As Part of The FLARC 2021 *Kawfee Tawk* Speaker Series On Friday, June 11th Via Zoom

A recent audit by HamLog reported that over two-thirds of **all** recent QSOs were via either FT8 or FT4. But there are many different digital modes used in amateur radio. Yes, most of us have heard or used some of the popular ones like FT8/4 and PSK-31. But what about the others? What are they good for?

Barry Feierman K3EUI will take a deep-dive into the characteristics and uses of "the other" digital modes as The Fair Lawn Amateur Radio Club (FLARC) continues its highly acclaimed series of monthly speaker programs with one of the experts in digital communications, providing a basic overview to using those often-underutilized digital modes and their advantages.

K3EUI started his radio career as a 13-year-old (KN3EUI) using a Gonset II Communicator on 2-meter AM with 10 watts and two crystals. Getting his Extra while a teenager, he has been a hooked ham for life. Barry has a background in astrophysics and a career as a physics and astronomy teacher both in high school and at West Chester University and Bryn Mawr College.

Now retired with two grandchildren, he is active in ARES/RACES in Chester County, PA and other regional radio clubs. He is also one of three net control operators and net manager for the PA NBEMS PEMA net every Sunday at 0730 on 3583.0 kHz. His QTH is home to 12 antennas and his primary interest is in digital modes.

He also plays saxophone and recorder and is an avid kayaker, while remaining active in the SE Pennsylvania section of the American Association of Physics Teachers.



Barry K3EUI

A FLARC "REUNION" WHILE PROVIDING COMMUNICATIONS FOR MEMORIAL DAY PARADE

While not exactly Memorial Day weather (cold but not rainy), several FLARC volunteers helped provide communications for the town's annual Memorial Day parade.

With state restrictions on gatherings and outdoor mask wearing lifted in time for the holiday, a great town turnout helped put the club on display in providing essential communications throughout the parade. It was also a first opportunity to catch up in-person with many club members and to meet for the first time some new members who have joined in the "era of Zoom".

A big thanks to the following volunteers — Gene WO2W, Fred W2ABE, Judith KC2LTM, Noel W2MSA, Ed WX2R, Stan KC2K, Gordon W2TTT, Nancy N2FWI, Jim N2JLF, Seth KD2VNA and Vlad AD2BS. A special shout-out to WO2W for all the work involved in coordinating activities with the borough.



















WA2BAU Wins K9LA Propagation CD

Congratulations to Gary WA2BAU for winning a CD copy of *The Shortwave Propagation Handbook* by our May 21st Kawfee Tawk speaker Carl Luetzelschwab K9LA.

The book was a donation courtesy of **CQ Magazine** via Rich Moseson W2VU, who is the editor.

Thanks, Rich!!





AMATEUR RADIO TESTING BY THE FAIR LAWN AMATEUR RADIO CLUB

On June 19, 2021 the Fair Lawn Amateur Radio Club will continue amateur radio test sessions on a modified basis.

These sessions will be held at the Ridgewood Masonic Lodge.

The location is at 99 South Maple Avenue, Ridgewood, NJ

The session starts at 9:15 AM.

A document will be provided to you prior to the date to indicate the time assigned to you.

You must have it with you to take the test.

Prior to Testing:

Send an email to wo2w@arrl.net requesting to book your spot.

PRE-REGISTRATION IS REQUIRED - NO WALK-INS ACCEPTED.

Upon Arrival:

You must have a government issued ID such as a valid driver's license or passport, a filled out Form 605, and 3 filled out copies of the FCC CSCE form.

Please Bring With You:

- You MUST bring and WEAR personal PPE items including a face mask.
- 2 pens and 2 pencils. None will be provided to you, due to possible virus transmission.
- Your FRN number, and (if licensed) a copy of your ham license or a valid CSCE (Certificate of Successful Completion Exam).
- Additionally, the \$15.00 exam fee. This is payable in cash (exact amount is a must).

THE GREAT FLARC HAMFEST Save The Date! June 5, 2021



Special Note: As non-profit, the IRS now requires that we disclose annually the use of paid lobbyists to our members and indicate approximately what percentage of their dues goes toward that. 0% of your 2021 dues payment will be used by the club to directly pay a lobbyist firm to lobby on behalf of all our members regarding pending legislation that impacts our hobby.

2021 Field Day ala Carte

With COVID -19, Field Day this year will not be done as a group activity again this year. We urge you to operate from home or remotely such as a POTA activation.

A few members will meet at Memorial Park (not supported by The Club) and operate much like Portable Day.

News and Notes

Good news for POTA activators:

New Jerseyans who get their first vaccine doses against COVID-19 by July 4 can request a "State Parks Vax Pass" through the state's website beginning May 27, and will have free access to state parks through December 31st.

Want call letter license plates?

Van W2DLT reminds us that NJ license plates for amateur radio operators are \$15.00 - apply to the state DMV.

Please Note: Operating at W2NPT

Starting in January 2019 club trustees have sign-in sheets for all operating positions. There is a clipboard at Operating Position #1, #2 (digital) and #4 with a form on which to sign up for half-hour time slots. No longer first come-first served, in fairness to all who want to use our club equipment and the new antennas. Hopefully some day we will again be able to use our operation positions!

Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

http://apparel.FairLawnARC.org
http://auction.FairLawnARC.org
http://blog.FairLawnARC.org
http://calendar.FairLawnARC.org
http://events.FairLawnARC.org
http://exams.FairLawnARC.org
http://facebook.FairLawnARC.org
http://news.FairLawnARC.org
http://swap.FairLawnARC.org
http://swap.FairLawnARC.org
http://tech.FairLawnARC.org

NEW!

https://groups.io/g/FairLawnARC



Online License Testing!

Are you looking to get your license or upgrade without leaving your home? All you need is a laptop computer with a video camera.

There are number of sites listed on hamstudy.org/sessions These folks will walk you through taking an exam online.

I have worked with both WB5QNG and AA7HW. If you have any questions, please contact me at mStevenk2sab@gmail.com

73, Steven Boston K2SAB

June 2021 *Near and Far* Net Controls

Here is the roster for net controls for the upcoming month as reported by Brian KD2KLN:

Date	Net Control
June 7	NP4H
June 14	KD2MOB
June 21	KD2KLN
June 28	N2AAM

But we need more volunteers to be net controls -if everyone takes their turn it's less burden on the others. And it's easy.

Volunteer --- don't wait to be asked (unless you really want to be flattered).

Ham Radio Is Contagious And It Won't Make You Sick!!

Some FLARC Members (Sadly) Made History This Month

If you have not paid your 2021 member dues, the clock ran out on May 31st. We are sorry to see you go and hopefully you will want to rejoin the club in the future. Dues are dues and rules are rules.

This will be your last issue of *The Resonator* and you will be taken off the groups.io roster as well.

Please makes checks payable to "Fair Lawn Amateur Radio Club" and send them to

Bruce Kalogera NJ2BK 163 Meadow Lane Secaucus, NJ 07094

Mail sent to the clubhouse will be delayed due to Covid. See website for other membership options.

Club Apparel — Get Them While They're RED!

Club apparel is always in vogue. Red is always "in" and your club friends all have them... you want a shirt or jacket for the next FLARC event! Great for Field Day!

Don't forget.... they're easy to order.

Go to www.hamthreads.com

or visit http://apparel.FairLawnARC.org

Check out the item selection that is posted on the FLARC website (with pictures and prices). Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo. Note: RED is the primary and preferred club standard shirt color.



Randy WU2S in March 2017. Randy is leaving New Jersey to return to his Midwest roots in Illinois. All the best, Randy!

2021 FLARC Nets On The W2NPT Repeater:

Near and Far Net Mondays at 8PM

Health and Welfare Net Wednesdays at 7PM

W2NPT and **NJ2BS** Repeaters

Help Wanted

The Publicity Committee is looking for some new members to help continue to improve the marketing and promotion of the club, it's activities and amateur radio. This is an active group so a willingness to participate is a strong plus. Experience in digital marketing and/or public relations is a plus.

Call Ed WX2R at 802-282-6700 or email him at wx2r@arrl.net if you're interested.

Remember: Ham Radio Is A Contact Sport!

BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such as gift is worthy.

About The Club

The Resonator is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception. The club is sponsored by the Borough of Fair Lawn. The club meets every Friday at 6PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM, on Zoom for now.

Visitors **ARE ALWAYS** welcome at our meetings.

FLARC operates the W2NPT repeater (145.470-PL **167.9**) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has over one hundred fifty paid members.

Dues are currently \$25 per year;
\$20 for new members.

Content opinions and expressed bν contributors do not necessarily reflect the policies of the Fair Lawn Amateur Radio Club, its officers or members. Contributors grant express permission to FLARC to distribute articles in this or any issue of The Resonator. Authors also grant express permission for the use and/or repurposing of these articles, in part or in full, in other publications with credit to the original author and to The Resonator. All material is copyright ©2020. Do not copy or reproduce any of this material without the written permission of FLARC.

A New Net Is Born!

The Health and Welfare Umbrella Net
Wednesdays
7PM Local
W2NPT and NJ2BS Repeaters
Open To All

PUBLICITY COMMITTEE NEWS

The Publicity Committee is seeking new members to help grow the club with its varied activities. Enthusiasm desired... no experience necessary. Contact Ed WX2R or any other committee member.



FAIR LAWN'S COMMUNICATIONS CENTER! With New Antennas On The Roof!

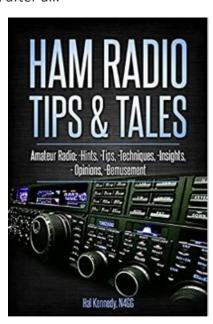


FLARC Club Member Publishes New Book!

Our own Hal Kennedy N4GG has published a monthly column in *The Resonator* for over three years. He recently published new book *Ham Radio Tips and Tales* that makes for great Summer reading.

Here is a compendium of 36 essays covering a wide range of topics of interest to all hams; from seasoned ops, to beginners, to those studying for their first license. Some of the articles are technical in nature - highlighting valuable techniques that have been known for years but are rarely shared or written about. They've been chosen because they are actionable. Follow those chapters to build a better station that's easier to operate while saving time and money.

The book contains no advanced math. It is Hal's conviction that if you can handle algebra, you can have a ball on the air and appreciate and use every chapter of this book. Age-old questions such as "Do I need a balun to feed a dipole?" are answered. The chapters on "What's the best radio?" and "What's the best antenna?" may surprise you. There are also some humorous chapters and humorous comments throughout. This book is not dry. Ham radio is fun after all.



Find the book at Amazon. As you wrote the last time you did a book report: you will enjoy this book and recommend it to everyone!!

2019-20 Member Profiles

The year is now complete and here is a list of the 2019 monthly profiles. See past profiles elsewhere in *The Resonator* to check back in the archives to see each featured member's background.

Month	Name	Call Sign
January 2019	Dave	KD2JIP
February	Jim	K2ZO
March	Zach	KC2RSS
April	Bob	N2SU
May	Stan	KC2K
June	Steve	WA2BYX
July	Roger	K2RRB
August	Judith	KC2LTM
September	Chris	W2TU
October	Bob	N2SU
November	Bob	WA2ISE
December	Carol	KD2NMV
January 2020	Gordon	W2TTT
February	Chris	KD2JQZ
March	Glenn	KD2MDR
April	Steve	K2SAB
May	Ahmed	NJ8Y
June	Charlie	AC2ZU
July	Jim	N2JLF
August	Walt	K3DQB
September	Gregg	N2ECH
October	Jim	W2KNG
November	Dave	KD2SGM
December	Bill	NB1ILL

2021 DUES ARE DONE / FINAL CALL

If you have not paid your 2021 dues, this is your last issue of The Resonator as you've been dropped from the club roster. We want you back!

Please makes checks payable to "Fair Lawn Amateur Radio Club" and send them to

> Bruce Kalogera NJ2BK 163 Meadow Lane Secaucus, NJ 07094

Mail sent to the clubhouse will be delayed due to Covid. See website for other membership options.

Past FLARC Member Profiles

Here is a list of past member features and we welcome your recommendations for new profiles -- including your own.

Month	Name	Call Sign
January 2016	Pete	KB2BMX
February	Marco	KC2ZMA
March	Ron	KC2TBD
April	Kai	K2TRW
May	Larry	WA2ALY
June	Dave	N8MAR
July	Steve	WI2W
August	Thom	W2NZ
September	Brian	KD2KLN
October	Brad	KM2C
November	Al	WA20WL
December	George	W3EH
January 2017	Fred	W2ABE
February	Dave	KD2MOB
March	Randy	WU2S
April	Lee	KD2DRS
May	Gene	WO2W
June	Carol	KD2NMV
July	Kevin	KC2KCC
August	Robert	KD2NOG
September	Robert	KD2BKD
October	John	KD2NRS
November	Fred	W2AAB
December	Margaret	W2GB
January 2018	Brian	KD2OAZ
February	Bennett	ко2ок
March	Van	W2DLT
April	Aly	ALØY
May	Bruce	NJ2BK
June	Dave	N2AAM
July	Karl and	W2KBF and
	Susan	W2SKT
August	Steve	KA2YRA
September	Paul	K2PJC
October	Skip	KD2BRV
November	Jim	W2JC
December	Tom	N2AAX

By the way, Randy (WU2S) has compiled a binder of all back issues of *The Resonator* and it's located in the club office.

Thanks Randy!!!

Blood Donors Needed In This Time Of Emergency

The Red Cross and related organizations are in great need for blood donations since most corporate blood drives have been cancelled.

<u>Communitybloodservices.com</u> has a network of offices open during the week and would really welcome folks making appointments to donate blood.

Thanks!



2021 Member Profiles

Here is a list of the 2021 monthly profiles. See past profiles elsewhere in *The Resonator* to check back in the archives to see each featured member's background.

Month	Name	Call Sign
January 2021	Ed	KD2TVT
February	John	W2USN
March	Noel	W2MSA
April	Gene	KD2VNI
May	Berlotte	KD2MYF
June	Noel	N2OEL
July		
August		
September		
October	_	
November	_	
December		

Want to be profiled? Send a note to wx2r@arrl.net and you too can become famous!

New Member Profile, continued

activation. It was to work at a shelter in Lodi, New Jersey, and then in the early morning hours of April 17th, I manned the main station at the Hackensack Red Cross office. In later years, I also volunteered for the Red Cross station operations in Ridgewood, after they sold the Hackensack location.

I took CERT training around 2002. I was a member of the Maywood CERT for several years.

In 2004, Tony Izzo K2AMI twisted my arm to join the RACES OEM in Carlstadt, as they needed a volunteer to maintain the RACES station. With the help of Bill Konsas WA2JKY, I manned that station until 2011.

In December 2009, my wife was diagnosed with stage four ovarian cancer. This limited the amount of time I could spend on volunteer activities.

In New Jersey, I currently belong to the Bergen Amateur Radio Association, the Fair Lawn Amateur Radio Club, and the Chestnut Ridge (146.955) repeater organization.

During the winter, I live at my permanent home near Ocala, Florida (Grid: EL89ub) and I am a member of the Friendship Radio Club (N4FRC.org). I lost my original CERT graduation certificate and FEMA does not have those records. In the spring of 2020, I again took the CERT course and the required online FEMA courses. I am currently a member of the local CERT organization.

During the summer I can be found near my childhood home of Dundee, New York (Grid: FN12mm) and I am a member of the Keuka Lake Amateur Radio Association (KLARA.org).

During the Spring and Fall of each year, I often can be found at my brother's house near Lucedale, Mississippi (Grid: EM50qt) or at my sister's house in Gulfport, Mississippi (Grid: EM50kj).

My radios in my Ocala home are a Kenwood R5000 for SWL, a Yaesu FT-897d, and an IC-208H for UHF/VHF. I am in a HOA community, and they limit all outside antennas. I have an Alpha Delta DX-EE, 40-10 m antenna strung in the 40' long crawlspace in the attic. Next to it is a 2m-440 mobile antenna mounted on a 30 in.² piece of aluminum. The noise floor is horrendous.

While I have a Heath SB-1000 amplifier along with a Heath tuner, I cannot use it until I install a disguised outside antenna.

FLARC May 15, 2021 VE Testing Results

With VE testing back on a trial basis, Gene WO2W reports the following results:

Name	Call	License Earned
Esther Helms	KD2WKE	Technician
John W Meclars	WA2MIB	Extra
William Cali	KD2WKF	General
James V Struzione	KD2WFC	General
Louis Vitale	KD2VZM	Extra
Colin L Wrench	KC1PJH	Technician
Michael W Schreck	KD2WKD	Technician
Antonio J. Gonzalez	KD2WKH	Technician
Theodore C. Birgler	KD2WKG	Technician

Testing for June will be indoors, at the Ridgewood Masonic Lodge - with "Covid Restrictions."

See page 2 of this Resonator copy, and also the FLARC website for the latest details.

Six Special Interest Groups [SIGs] Already Formed: Any Others?

We may be coming out of lockdown but there is no lack of club interest. Six groups formed and lots of participation.

Other possible groups, from the member survey, include:

- Radio Propagation
- Antennas and how they work
- Kit building
- Raspberry pi and Arduino and
- Ham radio software

Anyone interested in leading any of these groups...? Please contact Nomar NP4H.

Support Our Advertisers!!



Image from May, 1926 QST, courtesy ARRL

The Way We Were By Fred Belghaus W2AAB

North Jersey's "Radio Row" Part 2

There was a time, not too long ago, when you could travel just a few miles and buy whatever electronic components you might need to build or repair a piece of electronic equipment; or buy a complete transmitter, receiver, transceiver, antenna, and just about any other accessory for your amateur radio station, SWL listening post, or CB set-up. This month, we will continue our look at companies in our area that serve, or have served, these and similar electronic needs. We will focus this time on dealers and distributors, some of whom are still in business, while most are not. They will be listed in alphabetical order. How many do you remember?

AARON LIPPMAN ELECTRONIC DISTRIBUTORS

Newark

This company was established in 1922 [1] as a distributor of radio-electronic components. It was evidently frequented by radio amateurs and experimenters, and even advertised in a High School Yearbook in 1952. [2] It was also a dealer for Hallicrafters receivers in the early 1960s. [3] The final reference I have been able to find online is another advertisement, this time in another High School in Newark, in 1964. [4] They are no longer in business.

ABARIS SYSTEMS

Stuyvesant Ave., Lyndhurst

Abaris was established sometime in the late 1970s as a dealer in C.B. equipment, scanners, and some amateur radio equipment, new and used. The owner was a ham, but I have forgotten his call. They were possibly the successor to the Camera Shop (see below). I once bought a vintage E.F. Johnson "Adventurer" transmitter here for a very reasonable price. The rig required only replacement of the D.C. milliammeter to make it fully operational. My first contact with it was with a DX station, while running about 30 Watts output on 15 meters. I later sold the "Adventurer" to a local ham who said he once had one as a Novice. How could I resist selling it to him? Abaris closed sometime in the 1990s.

ARCTURUS ELECTRONICS CORP.

502 22nd St., Union City

This company once ran ads in 73 Magazine offering some solid state components and television items to hams.

LATEST ARCTURUS SPECIALS • Color focus rectifiers, 14,000 PIV at 1 MA, 99¢ each. 6.5 KV - 79¢. • Color TV yokes, 70° and 90° types. Fit almost all sets - \$10.95 each. • DS-501, 2N278 power transistor types, Cat, 7494 - 69¢ each. • DS-501, 2N278 power transistor types, Cat, 7494 - 69¢ each. • HEP170, Motorola HV/Current epoxy silicon rectifiers, 2.5 amps at 1000 PIV - 49¢ each. • Fully 'transistorized UHF tuners, Fit most sets. Cat, #UHF567 - \$4.95 each. • UHF tuners, 1 tube type. Fit most sets. Cat, #UHF3 - \$3.95 each. Complete listings of electronic items at similar bargain prices are available. Write for our latest catalog, Minimum order \$5.00, plus postage. ARCTURUS ELECTRONICS CORP. 502-22nd St., Union City, N.J. 07087. Dept. 73 Phone 201-UN4-5568

They also ran an advert placed in another electronics publication [5] for an "Inventory Reduction Sale," including a large selection of components and tubes, including a type UX200. The UX200 was a 1920s era tube, which suggests that this company may have been the old Arcturus Radio tube company, selling off its tube inventory plus additional overstock and surplus parts from other companies. Any further information from readers would be appreciated.

ARROW ELECTRONICS (Later ROUTE ELECTRONICS/ROUTE 46 ELECTRONICS)

225 Route 46 West, Totowa

Midland Ave., Saddle Brook

Arrow was originally founded in 1935 on Cortland St. on New York's "Radio Row," but its present Corporate Headquarters is in Colorado. [6] They operated under the Arrow name in the 1960s, but local hams remember them mainly under the names "ROUTE ELECTRONICS" and "ROUTE 46 ELECTRONICS" at their Route 46 store in Totowa.



73 Magazine, August, 1966

They were a full line distributor of electronic components and a dealer for amateur radio manufacturers, especially R.L. Drake. Their "counter guys" were George K2DWL (Silent Key), and Gabe WA2EOU. Both of these gentlemen were very knowledgeable and dedicated to serving their customers. I can't begin to recall everything that I purchased here, but among them was a Drake TR-6 SSB 6-meter transceiver, about 1971, and many parts for building projects. The last ham equipment that they sold included some of the final ham products made by R.L. Drake: the TR-7 HF transceiver, R-8 Receiver, and UV-3 VHF/UHF transceiver. Their closing was a big blow to local hams.

After Route Electronics closed, the Arrow Electronics facility on Midland Avenue in Saddle Brook continued to operate for a number of years, but solely as a wholesale distributor to industry. It, too, closed several years ago.

BICKOFF, LEON (SCRAP METALS)

199 Oraton St., Newark

Bickofff was a dealer in metal scrap, but he once had a large selection of surplus electronic equipment, mainly from industry – such as the ITT Nutley labs. One of our FLARC members, Van W2DLT used to frequent this company years ago, buying various items at "per pound" prices. They are no longer in business.



CAMERA SHOP (THE)

Stuyvesant Ave., Lyndhurst

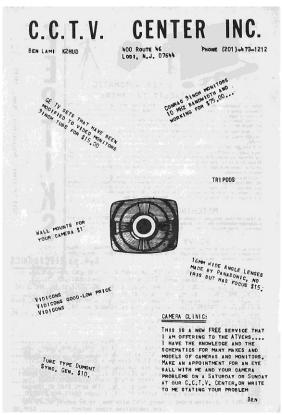
This business existed from the late 1960s to the 1970s as primarily a dealer in C.B. equipment and VHF scanners. The proprietor was a guy named Dave. Possible successor: ABARIS SYSTEMS (see above).

C.C.T.V. CENTER

400 Route 46, Lodi (Previously: Route 46 West, Little Falls)

This was a small company specializing in the sale of video equipment, specifically of interest to amateur radio operators involved in ATV (Amateur Television). Its proprietor was Ben Lami, K2HUD, once a prominent ATV enthusiast. Their first known advertising appeared in the amateur TV publication A5 magazine in 1968, followed by additional advertising in the same publication until 1972.





Two advertisements from C.C.T.V. Center: Left, A5 magazine, September, 1968; Right, A5 magazine, May, 1972

The company ceased operation following its proprietor's demise.

CHIPS TECHNOLOGY CIRCUITS

48 Farrand St., Bloomfield

Located upstairs from Electronic Barn (see below), this business still exists as a distributor of integrated circuits, acquired as "excess inventory." [7]

COMMUNITY COMMUNICATIONS & ELECTRONICS

671 Ringwood Ave., Wanaque (Formerly: Fair Lawn)

Originally located on Fair Lawn Avenue in Fair Lawn, this is a dealer in CB equipment, scanners, and some amateur radio equipment. They also provide repair services for these products as well as computers. The proprietor is Dave WB2AGJ.

CRYSTAL HARRY'S

Broadway, Newark

Crystal Harry's has been mentioned on a Vintage Radio Forum as a former distributor of electronic components. They evidently closed many years ago. There is one picture online showing its former location:

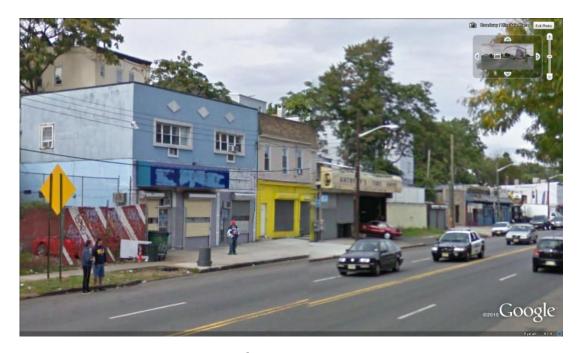


Image: Google, via K1XV qrz.com page

According to K1XV, Harry's was established by one Harry Adelman, and was once located in the building to the right of the building with the yellow main floor.

EASTERN RADIO

1055 Main Ave., Clifton [8]

Eastern was a wholesale distributor of electronic components to industry. They once published a large catalog similar to the EEM (Electronic Engineering Master). This business closed many years ago. Google maps shows that the building is now occupied by a restaurant and a deli, with apartments on the upper floors.

ELECTRONIC BARN

48 Farrand St., Bloomfield

Still in business as a wholesale distributor of electronic components, but they also have a listing online as a "Home Theatre Contractor."

FEDERATED PURCHASER

155 Route 22, Springfield (also Mountainside, Union, and Cliffwood)

At one time, Federated was a substantial dealer in electronic components and equipment, including amateur radio equipment. The company suffered a serious change in fortunes during the 1990s, which resulted in a change in ownership. [9]

In 1970, the Federated facility in Springfield filed for Chapter 11 Bankruptcy [10], and the facility was later closed. The only remaining address online for the company is a listing in Cliffwood, NJ, but there is no website or catalog showing their present activities, if any.



73 Magazine, September, 1966

GEM ELECTRONICS

Route 17 South, Paramus; Totowa; Wayne

Gem was a retail distributor of electronic components and equipment. Its detractors referred to it as "Peg Board City." It was a popular store for CBers and hams, especially for common items like tubes, diodes, and transistors. On their floor, they had bins of various parts, and a seemingly endless supply of small, epoxy encapsulated Calrad modules. I once bought a Calrad "warbler" module at their Paramus store, which was later used with an outdoor speaker to scare away critters in my backyard. I once used one of their "audio amplifier modules" to provide audio output from a touchtone pad, when one of the local 2 meter repeater groups was considering using CTCSS touchtone access, before installing a PL tone activated system. One of my high school ham friends once complained about Gem that "all they have behind the counter in that place is more catalogs." They closed around 1971. My good friend Pete, W2PM, once worked here, and he has his own stories to tell about his experiences there.

GILFER ASSOCIATES

52 Park Ave., Park Ridge

Gilfer was established by renowned SWL and expert on HF propagation, Oliver "Perry" Ferrell, primarily to serve the SWL community. The name GILFER was derived from Perry's wife's maiden name, Gillespie, and his own name, Ferrell. [11]

Gilfer sold mainly HF communications receivers and VHF/UHF scanners, and various SWL accessories. Some of the manufacturers sold were R.L. Drake, Japan Radio (NRD), Icom, Panasonic, Sony, and other makers of accessory products, such as MFJ. They also sold a large selection of books on SWLing, many by "Perry" Ferrell himself. One of the most popular of these was Ferrell's Confidential Frequency List, a copy of which graces my own bookshelf.

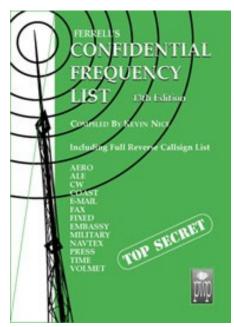


Image: https://www.hfunderground.com/wiki/Oliver P. Ferrell

"Perry" had a long history in SWLing and propagation studies. He was the DX Editor of CQ Magazine in the 1940s. He later served as the Editor of Popular Electronics magazine from 1956 to 1971. [12] One source reported that "Perry" died following a car accident sometime in the 1980s [12] and the business was continued by his wife Jeanne for some time afterward, but they closed their doors for good in 1997. [14] I purchased my Icom R-71A HF receiver here from Jeanne in 1983. Some links for further information about Gilfer can be found at Notes [15], [16], and [17].

GREGORY ELECTRONICS

249 Route 46 West, Saddle Brook

Long before Kenwood, Yaesu, Icom, and Baofeng provided VHF-UHF FM equipment, there was Gregory Electronics. Although I cannot find information about when Gregory was established, I estimate that it was sometime in the early 1960s. Gregory sold used 2-way FM communications equipment, removed from service by governments and businesses such as taxi and trucking companies. They sold mainly Motorola, but also other manufacturers such as General Electric, Link, and Federal/FTC (Later ITT/Federal). Their store was piled high with these FM rigs, chiefly mobiles, but there were some base stations, as well.

Starting in the mid to late 1960s, they became the goto source for hams wishing to convert these FM rigs for use on the 10, 6, and 2 meter bands, as well as 70 cm. Many an early repeater operator from the tri-state area found their first repeater here, too; either complete, or that had to be assembled from various transmitter and receiver strips and power supplies.



Gregory Electronics ad, *FM Magazine*, March, 1968

I believe they also sold accessory equipment such as commercial VHF-UHF antennas and repeater accessories like duplexers, all removed from commercial or government service. In their heyday, Gregory advertised in 73 Magazine and in the specialist publication, FM. I'm not sure when Gregory closed their doors, but my guess is sometime in the 1980s. The former Gregory Electronics building on Route 46 is now occupied by a "vaping" shop. How times change!

H&L ASSOCIATES

Elizabethport Industrial Park, Elizabeth

Using their advertising as the only source of information I can find about them, H&L was one of several small companies in North Jersey buying and reselling transmitting, industrial and special purpose tubes and semiconductors. I found one ad for them, below.

WE PAY HIGHEST CASH PRICE

for Electron Tubes & Semiconductors Immediate Payment on Unused Tubes H & L ASSOCIATES Elizabethport Industrial Park Elizabeth, New Jersey 07206 (201) 351-4200

73 Magazine, November, 1969

HEATHKIT

35-07 Broadway, Fair Lawn

This nationally famous catalog house offered a wide variety of electronic kits, and once had a retail store in Fair Lawn. Founded in 1912 by Edward Bayard Heath in Chicago as an aviation company, by 1926 had sold its first kit: a light airplane called the Heath Parasol. Heath died in 1931, and after some bad business years, the company switched its focus to selling electronic kits in 1947. [18] The company soon recovered, and grew into a successful business. Its first electronic kit was a simple oscilloscope.



Image: https://ricochet.com/415405/archives/remembering-heathkit/

By the mid 1950s, Heathkit moved to Michigan, finally setting up shop in Benton Harbor. By then, their only serious competitors were Allied Radio of Chicago, which sold their line of "Knight Kits," and the Electronic Instrument Company (commonly called EICO), originally located in Brooklyn, then Long Island City. [19]

Heathkit continued to operate until 1992, [20] when all their stores were closed.

Allied's consumer/hobbyist group was bought by the Tandy Company, parent of Radio Shack, and this group continued to operate under the Radio Shack name. Allied continues in business today, but solely as a parts jobber to industry. [21] EICO switched gears in the 1970s, selling only audio equipment, later using factories in South Korea to manufacture, before finally throwing in the towel and becoming a "property management" company until 1998, when the company was liquidated. [22]

Many a beginning ham, and many experienced hams also, built Heathkits through the years. I was a customer at the Fair Lawn store many times, having bought and built several items: The "Cantenna" (1 kilowatt dummy load); a transistorized AM radio; a transistorized audio amplifier; a solid-state DC mobile power supply; the well known HW-8 HF QRP Transceiver, and probably some other items I've long forgotten.



The one and only Heathkit HW-8

Image: https://commons.wikimedia.org/wiki/File:HEATHKIT HW8 1.JPG

The HW-8 was the most ambitious kit project I had undertaken, but it was worth the effort. After a very minor tweak, it worked flawlessly for years, until I finally sold it to a fellow QRPer who had been eagerly looking for one. FLARC once owned a Heathkit model TX-1 "Apache" transmitter, as our main HF rig. Heathkit was a great place in those days, and its demise and half-hearted resurrection in recent years leaves much to be desired, in the opinion of your columnist. When Heathkit closed its doors in Fair Lawn, a lot of hams, experimenters, and audiophiles were left sadly empty-handed.

JERSEY ELECTRONIC DISTRIBUTORS CO. (JEDCO)

524 21st Ave., Paterson (previously: 301 Grand St., Paterson)

JEDCO was originally founded and operated by the three Horowitz brothers sometime in the 1950s. The brothers were all hams. They were Jerry W2CRJ, Art K2RLZ and Stan K2JQG. All three once lived in Fair Lawn. Their business was selling electronic components, primarily to the Radio/TV repair shops in the area. In the 1960s, their store was located on the 21st Avenue Circle in Paterson. In 1964, I purchased a power transformer there for a building project, and some tubes for my Drake TR-3 transceiver. They ceased operating around 1970.

JOHN RICHARDT (W2WIY)

Route 46 - Box 154, Great Meadows

John "Hammie" Richardt both manufactured and sold amateur radio equipment. He was listed as an early dealer for Kenwood, in an ad that offered the Kenwood "Twins" (T-599 transmitter and R-599 receiver).

ORDER YOURS TODAY ... FROM ANY OF THESE FINE DEALERS: HENRY RADIO • 11240 W. Olympic Blvd. • Los Angeles, Christi, Texas 78404 • (512) 883-5103 Calif. 90064 • (213) 477-6701 Butler 1, Missouri HERBERT W. GORDON COMPANY . Woodchuck Hill Road • Harvard, Massachusetts 01451 • (617) 456-3548 Calif. 92801 • (714) 772-9200 HARRISON - Rte. 110 at Smith - Farmingdale, N.Y. AMATEUR ELECTRONIC SUPPLY - 4828 S. Fond du Lac 11735 • (516) 293-7990 @ 8 Barclay St. • New York City Avenue • Milwaukee, Wisconsin 53216 • (414) 442-4200 AMATEUR RADIO CENTER • 2805 N. E. Second Avenue • RE 9-4101 Miami, Florida 33137 • (305) 374-4101 JOHN RICHARDT, W2WIY • Rte, 46 P.O. Box 154 • Great DOUGLAS ELECTRONICS • 1118 S. Staples • Corpus Meadows, N.J. 07838 • (201) 637-4107

Ham Radio Magazine, February, 1971

"Hammie's" manufactured products will be featured in our upcoming column about North Jersey manufacturers. This company has been out of business for many years.

LAFAYETTE RADIO (Later, LAFAYETTE RADIO-ELECTRONICS and L.R.E.)

184 Route 17 North, Paramus

In their heyday, from about 1960 to 1970 or so, Lafayette was one of the most popular sources for electronic components and tubes in our area. They had several large tube testers on the floor that could be used free of charge by customers. It was common to see guys bringing large paper bags full of tubes for testing. They were probably "pulls" from their TV sets.

Lafayette also sold a large selection of electronic equipment including audio, test equipment, CB and amateur, that were manufactured by Trio (Kenwood), but sold under the Lafayette name. Their first such import was an inexpensive HF receiver known as the HE-10 (wired version), or KT-200 (kit version), starting in 1960. (See upper right item in the advertisement below).

This was a 9 tube superhet, styled after the Hallicrafters S-38, with the back-to-back "half moon" tuning dials, at least in appearance. But the HE-10 was a better receiver, and it was quite popular with beginning hams. It sold for \$64.50 in kit form and \$79.95, wired and tested – almost irresistible prices for an HF communications receiver of its kind back then. These prices were held at least until 1962.

At about the same time, Lafayette also featured the HE-30 receiver, a somewhat more advanced design, for \$99.95, wired. There followed more and more receiver models. They also sold inexpensive 6 and 10 meter transceivers, and a variety of CB transceivers, all made by Trio-Kenwood, and sold under the Lafayette label.

Lafayette had a separate "ham shack" in one corner of the store facing a street window, packed with new and used ham gear from many manufacturers. room was a popular gathering place for local hams, especially those newly licensed, and it was the place where yours truly purchased his first ham transmitter. receiver, and various accessories. In those days, the "ham shack" was manned by Mike, WA2ANY, and later by Stan, WA2LAL. gentlemen were always very helpful, especially to beginners.



Lafayette Radio catalog page, 1962. HE-30 receiver at upper left, HE-10 receiver at upper right.

Image: eBay

But Lafayette also acquired a "bad rep" for being a haven for CBers. At least some hams thought so, and their Japanese-made products inspired the creation of the disparaging nickname for the store: "Two Guys from Tokyo" (a play on the name "Two Guys from Harrison," a once popular local discount appliance store). In those days, it was widely believed that Japanese goods were inferior to American products. The truth is, Lafayette's Japanese-made products were actually very well designed, and held their own competitively with the more expensive products made by American companies. Side-note: Vintage Lafayette CB rigs have become very collectible.

As time went on, and interest grew in personal computers, Lafayette, like so many others, passed into history, and the Paramus store closed their doors for good. They are still missed. The former Paramus store is now occupied by an upscale cigar emporium. To see a Lafayette catalog from 1965, see Note [23].

LASHEN ELECTRONICS

Route 46, Rockaway (formerly: Denville)

Originally selling mostly components from their store, in recent years Lashen continues in business, but strictly as an online concern. They seem to concentrate now only on networking equipment, home automation, security components, and tools.

LEONARD RADIO

Route 17 North, Paramus

Their first store was established on the corner of Cortland and Greenwich Streets in the "Radio Row" section of lower Manhattan, [24] later moving uptown to 6th Avenue and 46th Street. [25] Their Paramus store opened in 1962. [26] This was a dealer specializing in high-end audio and video equipment, beginning in the 1950s and continuing until about 1970. Some of the brands sold included McIntosh, Klipschorn, Stromberg-Carlson, and Norelco (Phillips).

LEWISPAUL ELECTRONICS, INC.

303 W. Crescent Ave., Allendale

Lewispaul was another small company specializing in buying and reselling tubes. Like thev likely specialized the others, transmitting, industrial, and special purpose tubes. and advertised in amateur radio publications. Here's one of their ads ->

There is no further information available about them, and there is no listing for them online.

WE PAY CASH FOR TUBES

Lewispaul Electronics, Inc. 303 West Crescent Avenue Allandale, New Jersey 07401

73 Magazine, November, 1969

LIVINGSTONE ELECTRONIC LABORATORIES

12-01 Ellis Ave., Fair Lawn

This company was established in 1922 [27] and operated by Al Livingstone W2LA (ex-W2QPN) from his home basement. Al sold a variety of electronic components, audio and video equipment, tools, and technical books. By the 1960s, most of his business concentrated on World War II surplus radio equipment. Al was a retired Phys. Ed. Teacher at Eastside High School in Paterson, and his basement emporium was opened by appointment only. The most popular item sold by him during the 1960s was the

SCR-522 VHF transmitter-receiver, which was easily converted to 10, 6, and especially 2 meters by local hams. All passed away in the 1970s which brought an end to the business. For a personal recollection of All and his basement "surplus store" see *The Resonator*, "The Way We Were," September, 2020, starting on page 21.

MICRO ELECTRONIC TUBE CO.

P.O. Box 55-Park Station, Paterson



Image: Popular Electronics advertisement, 1956

Not to be confused with Micro Electronics, which is now a dealer in computer equipment on McLean Boulevard in Paterson, Micro Electronic Tube Co. was a distributor of vacuum tubes back in the 1950s.

Its actual street location was 112 Martin Street in the South Paterson section of the city. [28] No further information about this company can be discovered online. The building at 112 Martin Street is now a Spanish language house of worship.

MOTOROLA PARTS DEPOT

85 Harristown Rd., Glen Rock

Yes, the famous manufacturer of 2-way FM mobile and base station equipment once sold spare parts for its products out of their service depot on what is now Harristown Road in Glen Rock. They even advertised in an amateur radio publication. One of these ads, shown here, appeared in 1972 – when there were still plenty of Motorola radios being used by amateurs using FM on the VHF bands and 70 cm.

The advertisement was specifically directed to amateur TV operators, who used Motorola transmitter and receiver strips on 439 MHz for their ATV operations.

MCTOROLA SLUG REPLACEMENTS

THE MOTOROLA THE SLUGS OCCASION-ALLY FREEZE AND REQUIRE REMOVAL AND REPLACEMENT, PLEASE DO NOT USE YOUR ELECTRIC DRILL TO REMOVE THE OLD SLUGS. NEW SLUGS CAN BE PURCHASED DIRECTLY FROM MOTOROLA USING THE FOLLOWING PARTS NUMBERS. HEX TYPE 76-835353 3 EA TO A BAG FOR \$0,26 SLOT TYPE 76-840025 2 EA TO A BAG FOR \$0.32 SEND YOUR ORDER TO -MOTOROLA PARTS DEPOT. 85 HARRIS ROAD GLEN ROCK, NEW JERSEY, 07452 PHONE (201)-447-4000

Motorola Parts Depot ad, A5 magazine, May, 1972

It is not known how much longer they continued to operate their Parts Depot, but the Motorola service center has closed. The only listing for Motorola in our immediate area is one for Motorola Solutions, in an office complex in Woodcliff Lake. I doubt that their current staff had ever heard of a T44!

MUSIC AGE

Route 4 West, Paramus

This was a short-lived business located in the last group of stores on Route 4 westbound, just before the highway enters Fair Lawn. It was established about 1958 by a ham from Paterson, but I have forgotten his call. They specialized in Hi-Fi equipment such as amplifiers, tuners, speakers, and turntables. Unfortunately, sometime in 1959, the store suffered a disastrous fire which reduced the building to a total loss. They never went back in business after the fire. I was 12 years old, but I remember being at a nearby store with my parents one day, and wandering over to

the charred remains. I poured over its burned tuners, amplifiers, and one gigantic "woofer" speaker, also feeling a sense of loss upon seeing all that ruined electronic equipment.

NIDISCO ELECTRONICS

Various locations:

Originally, Cliffside;

later: 55 State St., Hackensack;

294 Passaic St., Passaic;

Route 46, Hackensack;

64 Jefferson St., Hackensack;

143 Rochelle Ave., Rochelle Park.

Other stores were located in Jersey City and Trenton [29]

Apparently established first in Cliffside about 1950, the store most will remember is their longtime operation at 55 State Street, Hackensack. Nidisco was a popular distributor of electronic components – serving industry, TV and radio repair shops, amateurs, experimenters and other hobbyists for many years. The only location that appears to still be operating is the one in Rochelle Park, but its business focus is described as "Data network connectivity products, tools... testers... cabling systems... racks, and cable management accessories." [30]

NRM WHOLESALE RADIO

284 Teaneck Rd., Ridgefield Park; E.26th (?) St. and 4th Ave., Paterson

NRM derived its name from its founder, "Howie" Jack of Ramsey, whose amateur call was W2NRM. "Howie" started this business about 1954 at the Ridgefield Park QTH,



W2NRM QSL card, 1954 Author's collection later adding the Paterson store by the early 1960s. NRM sold virtually every component that a ham would need to build a complete station: transmitter, receiver, power supplies, and anything else the imagination could conjure up.

I used to frequent the Paterson store in the 1960s,

and there never was a time that I couldn't get what I wanted for the most obscure building project. They stocked transmitting tubes from low power to kilowatt power levels, and lots of technical books. They also sold some commercially manufactured ham radio equipment, including those of the once well known Italian company, Geloso. They were the only radio-electronics store in the area that sold Wayne Green's 73 Magazine. The store manager in Paterson was Bill WA2CUS, who was a Technician class, but who could answer any question put to him about selecting parts for your HF rig as well as VHF. Bill used to play the guitar and sing Country & Western songs, and he would often play tapes of his performances in the store. It was a sad day when NRM closed, about 1970.

O'MALLEY TUBES

525 Lehigh Ave., Union

One of several local companies selling chiefly transmitting tubes to hams. No further information is known about this company. Here's an early ad from them:

AMAZING 572B

Direct replacement for the 811A—but runs twice the power. Now only \$9.95 pp.

MO-2000 ZERO BIAS TRIODE Equal to four 572B's. \$29.95 pp.

Both tubes now being manufactured by the designer:

O'Malley Tubes

525 Lehigh Avenue, Union, N. J.

O'Malley ad, 73 Magazine, November, 1964

P.A.F. ENTERPRISES

32 E. 22nd St., Bayonne

The advertisement here ran in one issue of 73 Magazine, offering a variety of video electronic equipment, probably directed to amateur TV enthusiasts.

No online records exist for this company, so no further information about them can be reported. I suspect that their offering was a one-time attempt to sell the close-out, discontinued, or fire sale inventory from another company.



73 Magazine, July, 1965

PARTS UNLIMITED ELECTRONICS CO.

Paterson; Caldwell; Kearny and Morristown

The only store I remember was the one in Paterson, but I never knew the address. They were a general component distributor, but some of their branches also sold consumer electronics items, such as TVs. In 1957, my dad took me to the Paterson store to buy parts for a one tube radio project. Neither I nor my dad could get that radio to work. Parts Unlimited closed its stores many years ago.

RADIO SHACK

Various locations in North Jersey, including Fair Lawn and Elmwood Park

Originally established in 1921 in Boston, Massachusetts primarily to serve the growing amateur radio market, they issued their first catalog in 1939. [31] After entering the audio equipment market in the 1950s, they expanded to several more stores and entered the mail-order business by the 1960s.

Many more retail stores followed, selling a variety of components as well as manufactured electronic equipment serving audio, SWL, amateur radio, experimenter's and CB markets. Later in the 1960s, its fortunes reversed, and only its acquisition by the Tandy Company saved it from bankruptcy. [32]

Following Tandy's acquisition, it added telephone products and personal computers to its product mix, while scaling back its sale of components, and concentrating on more general consumer products.

But due to a number of missteps in management decisions, and their conversion into essentially a "cell phone reseller," the company filed for bankruptcy in 2015 and again in 2017 — with a confusing number of ownership and management changes — leaving only a handful of stores remaining in business, but none in our area. [33]

Ultimately, the story of Radio Shack, Heathkit, and others, is that of a good idea gone bad caused by a variety of bad management decisions resulting in a lot of disappointed customers that abandoned any hopes of a strong recovery to their original core business.

ROUTE ELECTRONICS/ROUTE 46 ELECTRONICS

See: ARROW ELECTRONICS

SAGAL ELECTRONICS

P.O. Box 117, Roselle Park

Only two advertisements in ham magazines have been found for this company, both in the 1970s. They were a dealer in radio communications equipment, including one amateur product, the "Brimstone 144" 2 meter FM transceiver. Here's one of their ads:

THE SUPERIOR 2-METER FM TRANSCEIVER!

**SUPERIOR APPRAINCE*

**SUPERIOR DESIGN

**SUPERIOR SELECTIVITY

**SUPERIOR SELECTIVITY

**SUPERIOR SELECTIVITY

**SUPERIOR SELECTIVITY

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Ham Radio magazine, November, 1975

In 1979, this company was debarred from contracting with the New Jersey State Government, per a report of hearings before the U.S. Congress. [34]

SIMON SIDEBAND

Oak Ridge

Established by Bert Simon, K2FZ (ex-W2UUN), this store sold CB and ham gear, new and used. Bert was also an active CBer, operating on SSB channels. My personal experience with Bert and his store dates to about 1970, when I purchased a Johnson KW Matchbox from him, new in the box for a reasonable price. He was a bit of a character, with a peculiar sense of humor. In years past, Bert was well known for winning VHF contests sponsored by *CQ Magazine*, his hilltop location no doubt being a factor in his big scores. He also once wrote a column in *CQ Magazine* called "Simon Says." He later moved to Florida, and passed away in 2006. [35]

SPACE ELECTRONICS

35 Ruta Ct., South Hackensack (formerly: East Paterson [Elmwood Park]; Upper Saddle River)

This company was established in Bronx, NY in the early 1960s. They bought and resold surplus military communications equipment. Their first known advertising appeared in an Amateur TV publication, showing a Bronx, New York address, offering "brand new ART-26 video transmitters with tubes in sealed cases." [36] For years, they advertised in *73 Magazine* offering to buy military surplus, especially the famous R-390/URR receiver, promising to pay the "highest prices anywhere." After moving to another

Bronx address, they crossed the Hudson and set up shop in East Paterson (now Elmwood Park) with an eye-catching ad that few hams then or now, could resist.



Space Electronics' eye-catching ad Image: *Ham Radio* magazine, July, 1969

By 1971, they had changed their name slightly to Space Electronics - Division of Military Electronics Corp, and moved to a residential address in Upper Saddle River.

SPACE ELECTRONICS division of MILITARY ELECTRONICS CORP. WANTS TO BUY

All types of military electronic equipment and parts, Call collect for cash offer.

> 76 Brookside Drive, Upper Saddle River New Jersey 07458 ● (201) 327-7640

Image: Ham Radio magazine, November, 1971

By 1975, they had moved yet again, this time to the address I knew them for, in South Hackensack.

MILITARY SURPLUS WANTED

Space buys more and pays more. Highest prices ever on U.S. Military surplus, especially on Collins equipment or parts. We pay freight. Call collect now for our high offer. 201 440-8787.

NEW ADDRESS

SPACE ELECTRONICS CO. div. of Military Electronics Corp. 35 Ruta Court S. Hackensack, N.J. 07606

Image: Ham Radio magazine, November, 1975

In the late 1980s, I visited Space Electronics at their South Hackensack facility on assignment for my employer. The company's proprietor was a ham from the Bronx, who told me that in addition to domestic sales, the company was doing a thriving export business. Looking over their large inventory, I was astonished to see a pile of R-390/URR receivers literally about 15 feet high and covering another 15 to 20 feet across. In those days, R-390s sold among hams in the \$300 to \$400 range. I was curious about the average selling price for these, and was quoted prices well over \$1,000 each. Who bought them at those prices? The owner said his best customers

were "certain South American governments." I don't know what became of Space Electronics, because they appear to be no longer in business. I also wonder what became of the rest of their R-390s. Maybe I should fly down to Rio or Buenos Aires, and look there.

STATE ELECTRONICS

36 Route 10 • Suite 6, East Hanover

State was established in 1956 and is still in business. [37] They are a wholesale distributor of electronic components. A current catalog is available online. [38]





SURPLUS ELECTRONICS

333 Hackensack St., Carlstadt

This business sold mainly industrial electronic surplus, chiefly lab grade test instruments and a wide variety of components. The equipment was piled from floor to ceiling, and there was little room to move about. The proprietor was a guy named Chuck, and I went there a couple of times in the early 1970s.

I had been told by others to never mention that I was a ham. He didn't like hams because "they're cheap." He was right about that, so I pretended I was buying for my employer, and was careful to only buy parts in quantity. I managed to get some good prices on brand new N, TNC, and SMA gold plated connectors in original packaging.

And I only paid \$10 for a used but like new condition X-band (microwave) variable attenuator that I had planned to use for a proposed 10 GHz station that never materialized.

Often, when you asked Chuck for the price on something, he'd say, "It's not for sale." I think he was waiting for a large offer, which I never gave him. I heard a rumor that when Chuck passed away, the contents of his store, probably worth millions, was simply scooped up, loaded into dumpsters and hauled away to the landfill.

TED DAMES CO.

308 Hickory St., Arlington

Operated by Ted W2KUW, this was one of the better known dealers in military surplus as well as transmitting tubes during the 1960s and '70s.



Ham Radio magazine, July, 1975

Ted was perhaps best known to hams as a local source for the Collins R-390 receivers as well as for high power transmitting tubes. He later moved to Ocean County, and passed away in 1990. [39]



Ham Radio magazine, October, 1975

HAMS! DON'T BUY USED TUBES COMPARE OUR PRICES FOR NEW TUBES RCA-GE-EIMAC-AMPEREX-ETC.

811A-4.75, 4-125A-27.50, 4-65A-12.00, 6R4GY-1.75, 807-1.75, WE350(807)-1.25, 4-400A-38.50, 813-20.95, 4-X150A-19.55, 4-250A-36.50, 4PR608-55.00, 4CX250B-21.00, 8235-13.25, 2e26-2.75, 1625(807-12* fill)-1.50, 417A-2.25, 644A-2.75, 6360-2.75, 602-3.50, 2X2-50, OD3-0C3-80, 8879-1.75, 5881-3.25, WE-CV677 1000WATT TETRODE-5.95, EIMAC-MACHLETT VT-158 1200-3000 WATT BOTTLE-READ MARCH 1969 ISSUE 73 HOW GREAT THIS IS-\$9.95 12V 20AMP DIODE POWER SUPPLY ILESS XFORMERI-4.95, RCA-6-12 VDC CONVERTER DEL. 20AMP-12.95 IDEAL FOR VOLKSWAGEN, SEND FOR OUT LEST OF OVER 3000 TYPES OF AMERICAN, BRITISH AND EUROPEAN IMPORTED TUBES. LARGEST STOCK OF XMITTING TUBES IN THE WORLD. SEND FOR OUR LARGE PARTS CATALOG (OUR PRICES ARE THE LOWEST IN THE WORLD. SEND FOR OUR LARGE PARTS CATALOG (OUR PRICES ARE THE LOWEST IN THE WORLD.

73 Magazine, November, 1969

UNITED RADIO COMPANY 56-A FERRY STREET

UNITED RADIO CO.

56-A Ferry St., Newark

United was another local company once selling transmitting tubes from various manufacturers, domestic and foreign.

Their advertising boasted that they had the "Largest stock of transmitting tubes in the world." This United Radio is apparently no longer operating. It is not to be confused with the United Radio in East Syracuse, NY, which is now the only authorized repair service for Kenwood amateur radio products.

VANBAR (VANBAR DISTRIB.)

P.O. Box 444, Stirling

The name was derived from its partners, "VAN" (FLARC member) W2DLT, and "BAR" Barry Baum, (ex-WB2EHU, originally of Fair Lawn, later ex-WA6WGO and KF6PGU). At first, Vanbar specialized in selling transmitting, industrial and special purpose tubes. I wish I could still buy those tubes for those prices!





Left, 73 Magazine, March, 1965

Right, 73 Magazine, May, 1965

Later, they added desk FAX machines and radioteletype equipment. Their main competitors for RTTY equipment were Alltronics Howard in Massachusetts and several other small companies in other states. Later, operating under his own name, Van sold thousands of 88 millihenry toroidal chokes for RTTY filter circuits.



Ham Radio magazine, November, 1971

Van has been a longtime entrepreneur in radio-electronics. Still in his teens, he started a TV repair business in Fair Lawn, his dad driving him all over town to pick up and deliver ailing TV sets for residential customers! Today, he enjoys his retirement from the corporate world, and still dabbles in buying and selling used equipment.

VETERAN'S SALVAGE CO. (AKA "VetSalCo")

74 21st Ave., Paterson (2 other addresses in Paterson, including one on Graham Avenue).

Proprietor Dave Wasserman was a legendary figure in the world of surplus parts and equipment in our area. Hams, experimenters, and people from local manufacturing and other electronics related companies frequented Dave's comprehensive, almost limitless collection of high quality surplus electronics. Dave was already in business in 1950 [40] and remained active for many years thereafter.

My first experience there was in 1969 or '70, when I and a co-worker at WJRZ were sent there to look for some parts needed by the Chief Engineer. My memory of that day is hazy now, but we were told by the boss not to bargain, just buy and get a receipt.

This admonition was repeated a year or so later, when I was asked to buy some N connectors for a new repeater being built in Ridgewood. "Buy a fistful," said our repeater owner. "Don't bargain with Dave," he warned, and I followed suit. I walked out with a bag of new connectors for a few bucks, so everyone was happy.

WAYNE ELECTRONICS

615 Route 23 South, Pompton Plains (Pequannock Township)

Established in the late 1970s, this retail distributor of electronic components and kits is still very much in business, and has become a popular place for hams, experimenters, and "makers."

Someone on a forum (I've forgotten which one), says: "they're like Radio Shack, but with knowledgeable people working there." One "maker" has written a glowing article about Wayne Electronics, which will give you a pretty good idea of what they offer. [41] If you visit Wayne Electronics, say hello to FLARC member Fred W2ABE.

- \cdot \cdot -

This column will give you a pretty good idea of the choices we once had, and sometimes still have, when wanting to buy electronic parts and equipment here in North Jersey. I don't claim this list to be complete. No doubt I've missed a few, and if anyone can add to this list, please contact your columnist. Perhaps they can be covered in a follow-up column.

Old timers will certainly have plenty of memories about many of these places, and if you'd like to share them, I'd enjoy hearing from you, also.

Until next month... 73, Fred W2AAB

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FIRST FLARC HAMFEST A ROARING SUCCESS!

Reported by Ed WX2R



"Fun At The Dump!" You bet!!

Leveraging a bright, sunny, and hot day, we had an event on June 5h that exceeded our expectations with well over 200 visitors from across the Hudson Division, ten sponsors, and more than twenty vendors. It pushed parking at our venue to its limit and at times we had to be "creative" to get everyone accommodated.

We received many compliments for our organization of the event with comments ranging from "the best hamfest I've been to" to "if this was really your first time, you had me fooled." All key sellers indicated that they would return next year. Mega-kudos to Gene WO2W who was the lead on the project and deserves the credit of the club, along with the organizing committee.



Why was it a success?

We were part of a perfect positive storm. First, we were lucky in moving the event forward in time from April – from a pandemic restriction

standpoint. Next was pent up demand coming out of the rescinding of Covid-19 regulations the day before and a year without hamfests. Third was an innovative use of technology via a website that provided announcements and handled seller transactions. Next was solid marketing in selling sponsorships and a constant stream of communications about the event. As the event approached, we garnered the right mix of "talent" from the ARRL, KJI Electronics, and Pete W2IRT (to do card-checking) to be part of it. For a bunch of first timers, we gave the impression that we *really* knew what we were doing.

And, of course, **your s**upport made for a great day. The volunteer turnout was outstanding (too many to mention here at press deadline). With lots of moving parts to coordinate – from handling the flow of cars off Saddle River Road, parking them in creative spaces all around the Recycling Center, opening a gate for cars and dump trucks to keep traffic moving (long story if you were not there), handling food, handling cash, sweeping puddles from the Friday night thunderstorm, and handling customer service issues, it was absolutely amazing; and results that speak for themselves. All that plus organizing everything we needed and moving stuff back and forth from the clubhouse.



We received many compliments from this event that reinforced why we are the 'best" club in NNJ... but we already knew that, didn't we?!

[More photos on page .]

A visit at the First Annual (?) FLARC'fest

















'Wouff Hangs' Really Work

by STAN EKIERT K3KKH

In the summer of 2020 a violent storm broke the support line on one side of my 140 ft. dipole after a 30 ft. branch had fallen across the wire. I couldn't repair it until late November when the leaves were off the trees, and I could see a potential tree branch from which to support a new line.

In the interim, I decided to use a Wouff Hang as part of the repair. A Wouff Hang is an ingenious rope support device that eliminates friction and wear between the tree branch and the support rope, and it can be put high up in a tree without climbing. Friction and wear from the tree are eliminated because the support rope is inside the Wouff Hang and not in contact with the tree. It was invented by Roy Lewallen, K7EK, and is described in the Oct. 2019 edition of QST, pp30-32. The Wouff Hang worked as advertised.



Figure 1- Lower Frame of the QVA supported only by the 40 and 20 meter verticals.

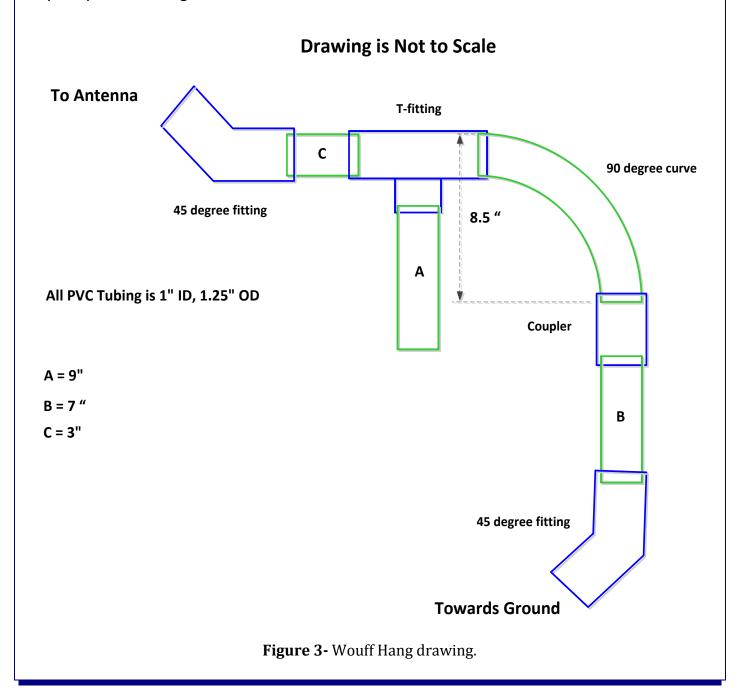
Then, a 2020 Christmas storm snapped two ropes supporting two of the four, ¼ wave dipoles in my Quad Vertical Array (QVA) [QST, Aug. 2016, pp 37-40]. The lower frame of the QVA, shown in Figure-1, should be horizontal but became vertical when the ropes for the 10 and 15 meter verticals broke. In early April 2021, with warming temperatures, I replaced all of the rope supports with 3/16 dia. Paracord rated at 750 lbs. I also decided to use another Wouff Hang (WH) to support the entire array. Figure 2 shows the WH attached to the support rope prior to it being raised into position. Once again the WH was easy to install and worked beautifully. I highly recommend it for permanent antenna installations.

In order to lift the WH into place, I wrap the rope, exiting the *antenna end*, around a ½" PVC pipe 5" long and secure the rope to the pipe with a tie-wrap. The white PVC pipe can be seen in Figure 2. The *ground end* the rope, the one that is over the branch, is then pulled back lifting the WH until it is in place over the branch. The *antenna end* of the rope is then pulled until the PVC pipe is near ground level where it can be easily removed from the rope and discarded. The *antenna end* of the rope is then attached to the antenna and pulled into position using the *ground end* of the rope. Because my QVA hangs vertically, I changed the orientation of the 45 degree fitting, at the antenna side, by rotating it 180 degrees so it would point towards the ground.



Figure 2- The Wouff Hang being raised into position.

A drawing of the WH is shown in Figure 3. I estimated dimensions of the various parts from Roy's article. Roy did not provide dimensions but did mention that he used 1" dia. PVC pipe and fittings; the 1" dia. refers to the inside pipe diameter. The design shown in Figure 3 is suitable for branches up to about 7" dia. As Roy mentions, it is important to distinguish between the *antenna end* and the *ground end* when installing the support rope. The *antenna end* connects to the antenna while the *ground end* eventually is secured to a tree or heavy weight to keep the antenna aloft. To install, hang the support rope over the desired branch with the *antenna end* of the rope being at least twice the distance from the branch to ground. This end is then threaded through the WH starting from the *ground side* of the WH, exiting at the *antenna side*, where all of the free end rope is pulled through.



What is a "Wouff-Hong?"

https://www.onallbands.com/what-is-a-the-wouff-hong/

In honor of Halloween, our Word of the Day features an object designed to strike terror in the hearts of any amateur operator who ever called CQ. Of course we're talking about the dreaded Wouff-Hong! On page 11 of the 1930 Radio Amateur's Handbook, it reads: "The Wouff-Hong is amateur radio's most sacred symbol and stands for the enforcement of law and order in amateur operation."

The origins of the Wouff-Hong can be traced back to none other than Hiram Percy Maxim, W1AW, co-founder of the ARRL and regular contributor to QST magazine, where he wrote the column, "Rotten Radio" using the pseudonym "The Old Man," or sometimes simply "T.O.M." Employing a great deal of Swiftian satire, his writing targeted poor operators and the babble he often heard on the air. In one example, he overheard an operator say a nonsensical abbreviation resembling "wouff hong." He later used the term Wouff-Hong to refer to a make-believe piece of Ham Radio equipment used to keep bad operators in line — a tongue-in-cheek warning to the Amateur Radio community of the importance of always using best practices when on the air. A picture of the Wouff-Hong — two pieces of wood strapped together with wire (kind of like a junior high school woodshop project cobbled together the morning it was due) — appeared in a QST article he penned in 1919.

Wouff-Hongs were given away at ARRL conventions back in the 1930s. Today, they are much-sought-after and pricey objects sold at auction. Shrouded in mystery (and filled with loads of good humor), Wouff-Hong ceremonies are often held at Hamfests. The ritual involves specific costumed characters (The Old Man, HiPotential, QRM, QRN, and Xtal) and, according to ARRL's Hamfest Planner, lots of rehearsing.

The planner reads, "Any ARRL-approved State, Division or National Convention is eligible to put on the traditional initiation into the Royal Order of the Wouff Hong. This event can be one of the highlights of a new ham's experiences."

Don't bother asking a an experienced Ham for details about the ceremony.

They have been sworn to secrecy.



Image: https://i2.wp.com/www.geardiary.com/wp-content/uploads/2013/01/WouffHong.jpg

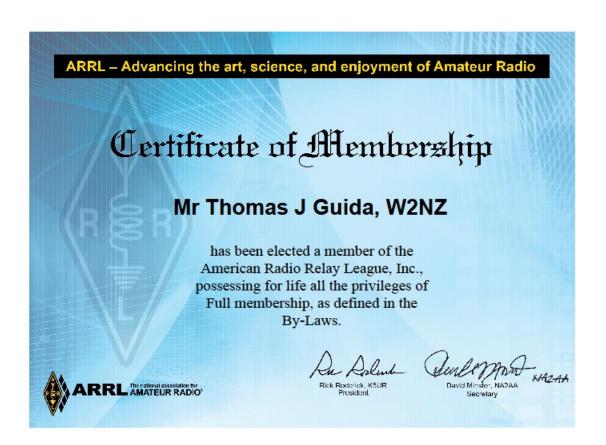
Congratulations!

Thom W2NZ has become a Life Member of the ARRL.

There is nothing more supportive of an organization than to hold life membership, so congratulations are in order.

Not a League member? The majority of FLARC members <u>are</u> (see below).

Why not join up at http://www.arrl.org/membership



The Fair Lawn Amateur Radio Club FLARC is an ARRL Affiliated Club, and has been for many decades.

For Category 1 -- Local Amateur Radio clubs, at least 51% of the voting membership must be members of the League, and at least 51% of the voting members must be licensed amateurs to be eligible for and to maintain affiliation status.



Around the Shack

Hal Kennedy N4GG/4

dB or not dB, that is the Question

There is a QST article I recommend you read. It was written by Dean Straw N6BV and is titled: Antenna Ads in ARRL Publications. The subtitle tells the story: "After more than 35 years, antenna manufacturers may once again advertise performance figures in League publications. Why this changed and what should the astute amateur consumer be looking for in an antenna ad (or product brochure)?" The article can be found in the QST on-line archives. Though published in April 1998, it's as relevant today as the day it was written.

I like seeing the word "astute" in the sub-title. In my humble opinion only astute hams who were in the hobby around 1963 noticed antenna performance metrics disappear from antenna ads in ARRL publications. Most notably, QST antenna ads no longer contained claims for forward gain, front to back ratio, etc. This was the result of a "horsepower race" among manufacturers where their performance claims started to strain credibility in an effort to outdo each other. The League banned the claims as there was no way to check them. This was a two edged sword however. To the extent some performance claims were legitimate, not having them put the buyer at a disadvantage. It made comparing one antenna to another difficult. On the other hand, false claims did what they were intended to do - lead buyers to poor decisions.

With performance metrics removed from the ads from 1963 to 1998, advertisers became creative with their verbal claims. If you were a ham then you remember ads like: "I worked the world with my Gotham vertical."

The advent of computers, followed by the advent of antenna modeling software changed things. With good models in hand, the ARRL was finally in a position to check advertisers' claims and in 1998 changed its "Advertising Acceptance Policy" to once again allow antenna performance claims in ads. Wisely, the ARRL put stringent stipulations in place before an advertiser could make specific claims about performance. The stipulations included requiring advertisers to provide the ARRL with a model of the antenna(s) in question - models the ARRL could use to independently check claims. Also, advertisers were required to include free-space performance numbers in ads, as a precursor to further claims. The thought was one antenna *could* be compared to another if the playing field was level and the best way to do that was to start in free space.

Which brings me to the point of this article. When it comes to antenna ads it is still "buyer beware." From a philosophical standpoint it's nice to know that manufacturers are no longer publishing incorrect claims, but from a practical standpoint buyers can still become misled, frequently by misleading themselves.

The root of the problem in attempting to compare one antenna to another is there are too many variables and the variables interact. To arrive at a fair comparison the variables must be treated parametrically, and the data needed to do that isn't in antenna ads. Here are four key variables usually not addressed in the ads:

Height above ground

The free-space performance of an antenna is helpful to seasoned antenna designers, but that's darned few of us. Moving from free-space performance to performance in one's back yard is an extrapolation most of us can't make. Meanwhile, height above ground has a huge effect on antenna performance and the effect is not uniform from one antenna design to

Around the Shack, continued

another. Two antennas may have identical performance one half-wavelength above the ground, but differ substantially one quarter-wavelength above the ground. If you are comparing the antennas in two ads, are the performance numbers provided as a graph of performance parameters vs. height? It would be rare to see that in a pair of ads, yet it's something we need for an informed decision.

What ground?

A lucky few of us operate over salt water. At the other end of possibilities is operating in a desert. Performance vs. ground description is never advertised, yet we need that information to be a wise consumer. As with height, two antennas may appear the same for one ground type, e.g. over salt water, and be different from each other over the ground in your back yard.

Bandwidth

Antennas can be designed to maximize performance over narrow bandwidths (high Q) at the expense of performance over a wide range of frequency, or vice versa. If you can find ads for two "comparable" Yagis, with each listing performance at 50.3 MHz, the broadband antenna will have lower forward gain than the narrow band antenna. If you are only interested in six meter DX, FT8 and weak signal work (all of which resides in the bottom 400 KHz of the band) the higher Q antenna is probably the one for you. But what if you are interested in both weak signal work at the bottom of the band and six meter repeaters at the top? The lower gain antenna is your best choice. Is the data needed to guide you through your decision provided? It rarely is. As an aside, the high Q antenna will be more affected by the weather (read: rain). Is this of concern? It won't be mentioned in the ads.

Pattern

Some Yagis have "clean" patterns with good forward gain, good front-to-back ratio and well controlled side-lobes. Others don't. The forward gain of two Yagis may be the same at the same frequency, at the same height, above the same ground, but the patterns may be different and ads won't provide you the insight you need to know which antenna best meets your needs.

You get the picture. The ads cannot be descriptive enough to support fully informed purchase decisions.

In my experience performance-based antenna decisions are made in one of several ways. These include:

- **Subjectively.** The newest or most exotic antenna may "look" best.
- **Anecdotally.** Listening on the air, talking to friends and reading informal reviews (eHam) is a better way forward than simply choosing the next shiny thing.
- **Analytically.** Review the technical details in the brochures (not the ads). Read the technical reviews in QST and the discussion of general antenna types in the ARRL Antenna Book. Model the antenna(s) if you can. If you can't, ask someone to do some modeling for you.

Around the Shack, continued

The final point I'd like to make is about perspective. How deep an understanding of antenna performance do we need? How accurate an understanding is possible? What do we need (not want) to make a purchase decision? If you want to work Japan on 160 meters, every dB counts. If you want to chat with your pals on 75 SSB, fretting about 1 or 2 dB is a waste of time.

It's important to remember that the best models we have are still only approximations, and initial conditions such as ground conductivity might only be known to one significant digit for a given location. It is easy to fall into the trap of mistaking precision for accuracy.

When deciding "dB or not dB" I think the ARRL got it right. Before modeling, what was being presented as useful data simply wasn't. The ARRL shut that down. When data could be checked by modeling, it was once again allowed in the ads. As long as one understands that the data in ads is insufficient to make fully informed decisions, the ARRL decision to allow the data back into the publications seems just right.

Good luck with your next antenna purchase!







Ed - itorial:

The Conquest of Digital Ham Radio

An interesting bit of data crossed my Twitter feed earlier this month. Michael Wells G7VJR, the creator and maintainer of ClubLog, reported the distribution of QSOs on the site from March 31-April 15, 2021. I was quite surprised by the results:

FT8	61.3%
CW	17.1%
SSB:	10.0%
FT4	6.6%
RTTY:	4.0%
Other	1.1%

Was it a typical two week period? I don't know but regardless, it points to the dominance of digital mode operation with more than two-thirds of all reported contacts.

My personal logbook for the period shows about an 70% FT8/4, CW 28% and SSB 2% distribution for the same period. FT8/4 has served a useful purpose for me in the solar doldrum years. But perhaps it is time to park this mode until the next downturn in the solar cycle.

What's in your logbook?

If the HF amateur world is really moving in this direction, perhaps our perception is no longer the reality. Aside from contest weekends, is there that little voice activity that is reported? Did CW make a comeback that it is now larger than SSB?

Maybe it is just that the bands suck lately, giving digital a better chance to take hold. Wait for sunspots to come back, they say. Well maybe... or maybe not.

They say ham radio is always evolving and this tiny snippet of data seems to prove the point. Being stuck in traditional analog modes, or even HF for that matter, (based on the great presentation by Bob KD2BKD on DUDE-STAR) seems to indicate that the hobby has far more contemporary facets of interest to build upon.

Or are we once again going to have to face the challenge of narrow spectrum data modes that will make it easier to lose spectrum to military or

Ed - itorial, continued.

commercial interests. Or... does FT8 represent "ham radio lite" that keeps human interaction (languages, voices, and culture) to a minimum and diminish our human understanding of the larger world?

How that translates into the future "marketing" of FLARC to member interests is one we should be considering as we come slowly out of the pandemic and increase our group interactions in the future.

What is ham radio and how does it grow and remain vibrant in the post-pandemic future?

de Ed WX2R

Pandemic Theatre

Richard Goode, W8RVH served in World War II. His hobby as an amateur radio operator took him to the South Pacific during the war to service radios on B-29s on Tinian Island. Dick recounts some of the stories, perspectives and experiences he has had in ham radio and the war. This version of the interview film includes more detailed information on his ham radio hobby, activities and radios that he worked on in the military.

From Vimeo – about 15 minutes:

https://vimeo.com/157806986

Bob KD2BKD Talks Dude-Star and DMR on May 14th

To a great crowd of 35 members and guests, Bob Holstrom KD2BKD provided a hands-on live demonstration of DUDE-Star. DUDE-Star is a software based Digital Voice radio system which works on Windows PC. It is similar to the EchoLink program. Setting up DUDE-Star for DMR Digital Voice communications was shown. DUDE-Star supports D-Star, Yaesu System Fusion, NXDN, and P25.

Thanks to a number of members including KD2MOB and KA2YRA for helping support Bob with the demo.

Digital Voice Special Interest Group Update

DigiVoice@FairLawnARC.groups.io

A Special Interest Group SIG for those interested in Digital Voice modes (Digital Mobile Radio) communications and software.

We are still using DMR TalkGroup 310015 on Tuesday evenings at 7:00pm, to always be done before the NorthStar Digital Net - which is at 8:00pm on DMR TalkGroup 31630. We thank Brad for the use of his DMR TalkGroup for this net.

Another local DMR Net is the BCFMA DMR Net at 7:30pm on Thursday nights. This net is only accessible via direct RF to the BCFMA DMR repeater in Franklin Lakes. For more information on the repeater connection information join the FLARC Digital Voice SIG.

There is a new DMR network out there called TGIF Network. We will be looking into this new network system to hold our DMR net on Tuesday evenings.

More information should be available soon. For those interested in learning more now see: https://tgif.network/index.php

For those interested in joining all the Digital Voice excitement, contact Bob H. at KD2BKD@optonline.net for information on the Digital Voice SIG.

Or just go to the club website **FairLawnARC.org** and use the "Join Special Interest Group(s)" link on left.

SEE BREAKING NEWS ON PAGE 61.



Radio Monitoring Special Interest Group Update

monitoring@FairLawnARC.groups.io

A Special Interest Group SIG for those interested in SWL and other radio communications monitoring.

As I prepare this article it is Memorial Day, a day on which we pay tribute to our fallen military veterans. In addition, December seventh of this year is the eightieth anniversary of the attack on Pearl Harbor which - brought this country into World War II.

A shortwave listener tuning the bands in those days would have been greeted with a plethora of interesting fare. In addition to the usual international shortwave stations there would have been maritime, aviation, military and other utility stations - not much different from what is on the HF bands today.

However, there were a few interesting radio signals that are totally absent from the HF spectrum in the twenty first century.

Eighty years ago you could tune around and hear raw feeds from news reporters in foreign overseas capitals sending their reports back to their broadcast network newsrooms.

In addition, listeners could eavesdrop on every transatlantic or transpacific phone call from the US to overseas points - as the technology did not exist at that time to establish Trans oceanic voice cables.

The calls were transmitted in ISB Independent Side Band. ISB is a system that uses the upper sideband and lower sideband of an AM signal for different voice circuits, so that you could transmit two independent conversations over one transmitter.

The engineers of that day knew that this system wasn't secure so they attempted to fix the issue by the use of primitive speech and frequency inversion and other similar methods, which really weren't that affective to a determined listener to bypass.

This sorry state of affairs came to a head during the war, as the allies needed a secure method of conducting real time phone conversations to discuss future operations against the Axis.

Continued on page 60.

Have you seen the ISS pass by?

For those who have never seen the ISS (International Space Station) pass by overhead, or those who have gotten lucky but may not have known what that was going by in the twilight sky, here are some tips and information to get a good view. Many times, during the passes the ARISS (Amateur Radio International Space Station) radio system is on. Sometimes in repeater mode, other times in APRS mode or SSTV mode. An astronaut may even call back if you are lucky.

Looking to get others interested in amateur radio? Take them outside to see the ISS and bring your HT and let them hear either the APRS packets or actual voice communication – depending on what mode the ARISS is in.

By Bob Holstrom - KD2BKD



Everyone I show this to always thinks it is cool that a little radio could pick up radio signals from 250+ miles above. I also sent APRS packets up and then went inside to show them on the www.ARISS.net map on the computer that the ISS heard me.

There are many programs, applications, and systems on computers and smart devices to track the ISS. Most that will easily be able to figure out when the ISS will be visible. Most passes of the ISS are not visible. The ISS typically passes overhead about 6 times daily, but only a possible 3 will be visible. Sometimes it is not visible for weeks, as the passes are either during the day or at night when the sun's reflection is not seen bouncing off the craft. It is much like seeing the moon at night. The moon is sometimes totally visible (full-moon), sometimes only a section (half-moon), and other times it is not visible at all (new-moon).

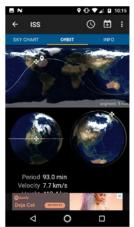
My suggestion of Android applications to track the ISS is "Heavens-Above." Heavens-Above tracks radio satellites and has a live sky chart feature to show other astrological events. This app is free but has advertisements. There is a paid version without ads for a nominal cost. Other features include night-time display mode and the ability to create calendar events, so you do not miss a sighting.











Bob Holstrom - KD2BKD, continued.

For web based tracking, what better place than to go directly to NASA at https://spotthestation.nasa.gov/. Here you can put in a town close to your location and it will list out all the visible sightings. There is no mapping function so you will have to figure out where to look in the sky with the information in the listing.



Date	Visible	Max Height*	Appears	Disappears	Share Event
Wed May 19, 10:21 PM	4 min	15°	10° above NW	10° above NNE	of 💆
Wed May 19, 11:59 PM	3 min	15°	10° above NNW	14° above NNE	II 💆
Thu May 20, 9:33 PM	5 min	17°	10° above WNW	10° above NNE	ff ⊻
Thu May 20, 11:11 PM	4 min	14°	10° above NNW	10° above NE	E
Fri May 21, 12:48 AM	1 min	17°	10° above NW	17° above NNW	f 💆
Fri May 21, 8:45 PM	5 min	21°	10° above WNW	10° above NNE	E
Fri May 21, 10:24 PM	4 min	13°	10° above NNW	10° above NNE	F S
Sat May 22, 12:00 AM	2 min	22°	10° above NW	22° above N	E
Sat May 22, 9:36 PM	4 min	14°	10° above NW	10° above NNE	I

For "i" devices you can try:



Sky Live: Heavens Above Viewer

Watch Skies: Stargazing App Vito Technology Inc. Designed for iPhone

**** 4.6 • 9.4K Ratings

Free · Offers In-App Purchases



GolSSWatch ISS Tracking

International Space Station GoSoftWorks Designed for iPad

**** 4.3 • 47 Ratings





ISS Spotter
Mediapilot
***** 4.7 • 433 Ratings

Free · Offers In-App Purchases

Bob Holstrom - KD2BKD, continued.

The ISS is the 2nd brightest object in the night sky when it is in the correct orientation to the sun. It looks like a twinkling star traveling from horizon to horizon for only about 5 minutes. Be sure to get in a good position without trees blocking beforehand.



While it is visible, it is a great time to try to receive and transmit to it, as it is easy to follow by just looking up and pointing a directional antenna. The frequencies used are:

Voice Repeater – 145.990MHz up (67 Hz tone) / 437.800MHz down

Note that with 440MHz doppler shift is affected

– Set radio to +/- 5kHz

Best if you can hear yourself with full duplex operation.

APRS – 145.825MHz simplex (Digi path: ARISS,WIDE2-1)
ARISS SSTV – 145.800MHz (Only Active during Special Events)

For current ARISS Status go to: https://www.ariss.org/current-status-of-iss-stations.html

QSL Cards are available if you receive SSTV, transmit APRS packets, or make a Voice contact via the ARISS repeater. More information on how to receive a card at: https://www.ariss.org/qsl-cards.html



For more information and help to spot the ISS, get radio communication to the ARISS, or just general interest in "Space Radio" join the "FLARC Satellite SIG" at: https://fairlawnarc.groups.io/g/Satellite-SIG

Satellite Special Interest Group Update

Satellite-SIG@FairLawnARC.groups.io

A Special Interest Group SIG for those interested in amateur radio satellites, as well as others like weather, GPS, etc..

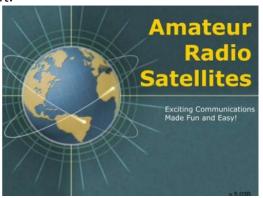
We welcome all those interested in all types of satellite communications. Some interests are AMSAT, ARISS, receiving weather maps from satellites, APRS via ISS, and much more.

Ever heard of WMPLOTA? It stands for "Wallmart Parking Lots on the Air". It is an Amateur Radio Satellite Operator special event taking place on the 1st weekend of July, close to the anniversary of the opening of the first Wallmart store. All participants are to be located at a Wallmart parking lot during the event. For more information check: https://wmplota.org/



For those interested in joining all the Space Radio excitement, Contact Bob H. at **KD2BKD@optonline.net** for information on the Satellite-SIG.

Or just go to the club website **FairLawnARC.org** and use the "Join Special Interest Group(s)" link on left.



Radio Monitoring Special Interest Group, continued.

The government enlisted the scientists at Bell Labs to address the problem and come up with a solution.

After a year of research and development in the summer of 1943 the folks at the labs came up with the answer. They called it SIGSALY.

SIGSALY was the first ever digital radio transmissions of encrypted voice.

The system consisted of a standard HF radio transmitter and receiver of the day but in addition the scientists added digital encryption to the mix.

The audio was digitized using a very low byte rate encoder which was then encrypted and modulated the transmitter with a type of COFDM signal. This resulted in a low quality but understandable human voice. at both ends of the circuit.

The encryption was established by using random noise recorded on phonograph records that had to be started at the same time at both ends of the path so that the system could synchronize and establish contact.

Only two copies of the recordings were made. One was shipped to London while the other stayed in Washington.

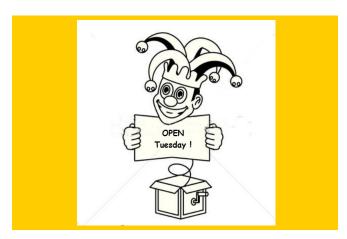
The conversation could only last for twelve minutes before the records had to be reset and synchronized once again.

The configuration allowed for only one full duplex conversation at a time.

SIGSALY was massive, with vacuum tube components and required five trailer trucks to transport.

If you were tuning the bands at that time and came across the signal all you would hear is a buzz similar to a musical instrument known as a Theremin.

Continued on page 61.



Pop Up Tuesdays Are Back!

Every Tuesday a group of FLARC'ers get together and talk everything... including ham radio. Small and intimate, the hour of chat is unscripted and casual. Often there is show and tell...

No RSVP is required; just show up.

The link is the same every week — https://zoom.us

ID = 814 8966 2864 pw = POP-FLARC [all CAPS for the passcode.]

BREAKING NEWS for DigiVoice SIG!

There is a new DMR Talk Group for FLARC.

It is on the TGIF Network.

The Talk Group number is 14547 by, request, because the FLARC 2-meter repeater frequency is 145.47MHz.

To use this Talk Group you will need to change the host setting in the hotspot, DROID-Star, or DUDE-Star to "TGIF Network" then to Talk Group 14547.

https://prime.tgif.network/tgprofile.php?id=14547

Radio Monitoring Special Interest Group, continued.

The scientists who worked on SIGSALY affectionately called it "The Green Hornet" after a popular radio drama which used the sound of a Theremin as a part of its signature theme.

It is interesting to note that after the war, when questioned, Nazi engineers who attempted to figure what that sound was thought it was some kind of multiplexed telegraph signal. They never knew that that sound was the key to our secret voice communication during the war.

So the next time you pick up your DMR or Dstar radio, you know now that you are using a descendant of SIGSALY — which was developed over three quarters of a century ago.

73 and good DX,

de N2AAM



The formation of the UK's pirate radio phenomenon had its roots in the unlicensed ships in Europe that would beam their music to audiences in the Netherlands and Scandinavia. Caroline's founder, Ronan O'Rahilly, an Irish pop manager, was tired of the status quo, and taking his cue from Europe, put a ship off the waters of Essex from which it was outside the reach of British jurisdiction.

What Is It? - Answer To Last Month's Question

By: Fred Belghaus W2AAB



https://www.etsy.com/listing/557009136/9781b-emi-29mm-113-side-window-vintage?ga order=most relevant&ga search type=all&ga view type=gallery&ga search qu ery=vintage+electronic+parts&ref=sr gallery-14-14&sca=1

It's an 11-pin photomultiplier tube, type 9781B, manufactured by EMI in the United Kingdom. Specifically, it contains a "blue-green photosensitive bialkali [1] cathode and nine high gain, high stability SbCs [2] dynodes of circular focused design." It is used in a Perkin-Elmer LS-50B Luminescence Spectrometer.

You knew all that, didn't you?

NOTES:

[1] Bialkali: Antimony-Rubidium-Cesium, *Wikipedia* article: "Photocathode," at: https://en.wikipedia.org/wiki/Photocathode#:~:text=A%20photocathode%20is%20a%20surface,generate%20high%20brightness%20electron%20beams.

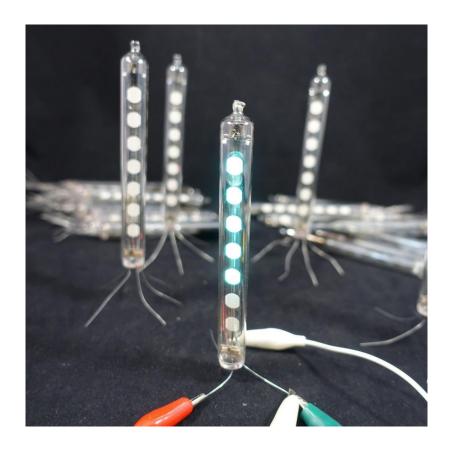
[2] SbCs: Antimony-Cesium, "Chemical Elements Alphabetically Listed," *Lenntech* website: https://www.lenntech.com/periodic/name/alphabetic.htm

73,

Fred, W2AAB

What Is It? - June, 2021

By: Fred Belghaus W2AAB



This should be an easy one.

Well, maybe not. They look something like those old school glass Christmas tree lights with colored water inside that bubbled when the current was turned on. Is that what they are?

What are they really, and how are they used?

Go ahead, and take a stab at it. Answer next month.

73,

Fred W2AAB



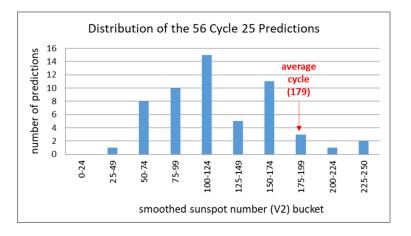
Propagation and Cycle 25 Report

2021 FLARC May 21st "Kawfee Tawk" Series

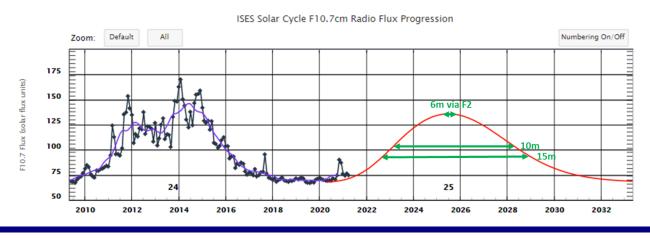
With 41 members and guests in attendance, Carl Leutzenschwab K9LA led a spirted presentation into the basics of atmospheric propagation and some prognostication for Cycle 25, which is now getting underway.

In a well paced presentation, Carl outlined a number of specifics -- why solar cycles are important, space weather and propagation, current propagation conditions, the current status of Cycle 25, and simple antennas for the higher bands (15m, 12m, 10m and 6m) which will come into a more dominant role over the next couple of years.

Two charts highlighted the evening. The first (below) is a look at all past solar cycles and some predictive sense of where Cycle 25 will fall. The consensus is that Cycle 25 will look much like Cycle 24 or nothing much to write home about. While there are a few outliers that indicate major solar activity, the goal for many of us will be to have fun with this one and hope we get another one 11 years hence.



The second chart forecasts the expected play-out of Cycle 25. Again, it looks much like Cycle 24, so let's hope for the best and better space weather to come. A great evening and a great speaker. The YouTube video will be coming soon for those who could not make it live.



Fair Lawn RACES/ARES Corner, cont.

are looking for a Net Control Operator and scribe for the BC-RACES Net.

Thank you to those who have taken part as the Net Control Station in the past.

During the COVID-19 pandemic, our monthly briefings take place during the FLARC business meeting. Please join us for the next FL-RACES briefing.

The volunteer efforts of our members are very much appreciated. If you are interested in joining the Fair Lawn RACES, please contact me. Anyone who's a licensed amateur radio operator may join Fair Lawn RACES and there's no residential requirement. For information regarding Bergen County RACES, please go to

http://www.bcnjraces.org.

Please be safe and be well. Thank you very much.

73.

David KD2MOB,

Emergency Coordinator FL-ARES and President FL-RACES







From The President, continued.

I also shared that sentiment as I had the opportunity to see many after months of being apart. To all our sponsors, supporters, volunteers, THANK YOU!

To all those that worked hard behind the scenes to bring us a successful event, THANK YOU!

To all those that worked hard at the venue, THANK YOU!

I don't want to mention names, but each and every one of you know how meaningful your contribution to the event was.

I will mention one person, Gene, WO2W who from the moment of becoming Hamfest Chairman, took the "bull by the horns" and brought us a day to remember. Gene, thanks for your dedication and your vision. We are proud of you.

We are looking forward to bringing you an even better Hamfest for 2022. The work has begun, we'll keep you informed.

Take care everyone... Stay safe and healthy!

73,

Nomar, NP4H FLARC President



Theoretics Demystified

Now for something completely different!

How about Glow Tubes, a tube of a different color, usually neon orange but sometimes argon purple. They are small tubes with two electrodes spaced apart inside a glass bulb or a little tube filled with an inert gas - mostly neon. They were used as pilot lights, oscillators and in control circuits.

When there is enough electrical potential [voltage] impressed between the electrodes, electrons are pulled away from the neon atom and ionization occurs and the resultant effect is that photons are released producing that familiar orange glow. The neon glow lamp is also influenced by other radiation sources such as ultraviolet and cosmic rays but these are not involved in our practical uses of a neon glow tube lamp. However the lamps are always slightly ionized due to the aforementioned sources.

When the lamp begins to glow the required current to excite diminishes slightly, but again this is not a factor in most uses of the bulb especially that of indicator. [it is called the negative resistance region]. If current is increased beyond the normal glow current/region, then the bulb enters the abnormal glow region, where most bulbs are operated in the lowest part of that region in order to get a good amount of light [think indicators] and to insure that a brief power glitch does not extinguish the lamp.

An external resistor is used to limit the current through the lamp because an increased current will cause the ionization to concentrate on a small portion of the cathode and will heat up into an arc which will eventually destroy the lamp.

As with any gas discharge lamp, the tube can be made to glow by external electrostatic discharges. Non conducting glow lamps have resistive and capacitive characteristics and conductive glow lamps also have inductive and voltage drop characteristics. As the glow lamp ages during use, the amount of gas that gets ionized eventually drops and brightness or light output decreases. The glass envelope also may become discolored or dark. Therefore glow lamps have a limited life span.

Theoretics Demystified, continued

Glow lamps can be used to make sawtooth oscillators. One way is to place a capacitor across the glow lamp and put that in series with a resistor. The other way is to put the resistor and capacitor in parallel, and the glow lamp in series with that. The difference is voltage ramping up then dropping in the first instance and ramping down then up in the second instance. What make it work is the difference between the lamp's firing and extinguishing potentials. And that is made to repeat by the resistor and capacitor in the circuit.

One of the characteristics is that because of the glow lamp's individual characteristics, the exact frequency cannot be totally determined, but usually is close enough for most applications. The lamp's negative resistance region, that is where increasing the potential actually decreases the current, is critical to using the glow lamp as a sawtooth oscillator so in order to maintain the desired oscillation. Generally the capacitor across the glow lamp with the resistor in series with those both is the circuit that is used for low or high frequency output. The difference here is the values of the resistance and the capacitor.

Also the input voltage is higher with greater values of R and C. The output is taken from the juncture of the resistor and the glow lamp and capacitor. Sinusoidal operation of a glow lamp oscillator is possible but it is critical that the power supply voltage be properly adjusted. The output is also lower than that of a saw tooth oscillator.

An astable glow lamp oscillator is where you have two glow lamps in series with resistors connected in parallel to the same supply but where the junction of both glow lamp resistor combinations are cross connected by a capacitor. This produces asymmetrical output from each opposite end of the connecting capacitor. As mentioned before, there is inductive, capacitive and resistive properties of glow lamps in operation which affect operation to a point that may or may not be influential upon the resultant output.

Continued on page 68.

In A Nutshell



It looks like things are getting somewhat back to normal. The Kutztown Pennsylvania semi-annual Antique Radio swap meet and Hamfest has taken place and so have several other hamfests including the Splitrock one.

As you read this, our hamfest will, or will have, taken place.

We are hoping for a somewhat normal, although smaller and modified, Field Day at Memorial Park in Fair Lawn and then the July fireworks presentation.

After that comes the Sussex hamfest and then others including the New Jersey Antique Radio Club swap meet, which is turning slowly into a hamfest as more members become hams.

As I write this it is only 44 degrees outside and it is almost June!! Things are opening up, so get outside and enjoy the summer!

As it was so aptly said by our club president, Nomar: "hams have been practicing social distancing for over a hundred years."

That said, it is time to be social again, but using common sense.

73, Frederick Wawra, W2ABE, 73!



Theoretics Demystified, continued

Glow lamps or neon bulbs as we know them can also be used in frequency dividing circuits, as in alarms and other operations, they can also be used to produce square waves by adding diodes and a couple of more resistors! There are also a number of logic circuits that have been employed in the past but have been obsoleted by modern semiconductors.

As with all things, technology marches on and things are constantly being upgraded and or replaced, but it is fun to go back and experiment with the basics of the things that are now so much more complicated. Back in the day, you could get into the circuitry that made things work, but now things are so complicated that they have become black boxes beyond the technical grasp of the average person - just take the modern HAM radio or HT for example.

I hope this blast from the past has been entertaining and enlightening for you "the reader."

Fred Wawra, W2ABE, 73.



NE-42 bulb



Common NE-2 bulb

June 2021 FLARC Business Meeting

The meeting was called to order by President Nomar Vizcarrondo, NP4H via Zoom video teleconference at 7:33 pm and concluded at 8:02 pm. Pledge of Allegiance was recited at 7:34 pm

Tom N2AXX facilitated a roll call and a quorum was established:

•	President:	Nomar Vizcarrondo,	NP4H
•	Vice President:	John Howard,	W2JLH
•	Treasurer:	Bruce Kalogera,	NJ2BK
•	Secretary:	Tom McCabe,	N2AXX
•	Trustees (3):	Don Cassarini,	K2PD
		Ed Efchak,	WX2R
		Fred Wawra,	W2ABE

Note: 28 participants attended this Zoom video teleconference

April 2021 and May 2021 FLARC Business Meeting Minutes were published in the May 2021 edition of The Resonator. A motion to publish in this matter was presented by Tom N2AXX and seconded by John W2JLH, and accepted by the membership.

The format of the June 4, 2021 Business Meeting was modified in order to finalize plans for the first annual FLARC Ham Fest to be held June 5, 2021 at the Borough of Fair Lawn's recycling center's parking area. A motion for the modified meeting was initiated by John W2JLH and seconded by Don K2PD.

The FLARC board and the general membership moved forward discussing the details for a successful Ham Fest starting the following morning. Gene WO2W was recognized for leading the FLARC Ham Fest. Dave KD2JIP was recognized for his effort with the FLARC Ham Fest Web Site, and payment options.

To complete the meeting as quickly as possible key discussion points were presented by: Ed WX2R, Nomar NP4H, John W2JLH, Vince KD2TMJ, Fred W2ABE, Fred W2AAB, and Judith KC2LTM.

1. Friday afternoon June, 4 around 2 pm; tables, chairs, generator, gas, and miscellaneous equipment were gathered at the club house and secured overnight

Continued on next page.

June 2021 FLARC Business Meeting, continued

in member's vehicles for a 5 am June 5 set-up at the recycling center's parking area.

- 2. A call for volunteers to set-up, tear down, and operational support (50-50, parking, on-site payment, etc.) of the Ham Fest was requested between 5:30 am and 1 pm.
- 3. Once the Ham Fest was broken down all items would be returned to the clubhouse.
- 4. Refreshment stand and supplies were ready.
- 5. FLARC special event station demonstrating Amateur Radio was staged for delivery.
- 6. FLARC Ham Fest was well publicized through flyers, print magazines, and electronic newsletters, multiple emailings and web sites.
- 7. FLARC Ham Fest is one of the first Amateur Radio in gatherings as Covid-19 cases subside and people are allowed to meet in person as a group per state mandates.
- 8. The W2NPT repeater would be used for "talk-in" and directions. FLARC members were encouraged to have portables on hand monitoring the repeater and 146.52 MHz.
- 9. Porta Potties were set-up in the southeast corner of the parking area.
- 10.Borough of Fair Lawn Police Department was contacted about traffic in the recycling center's general area and as a reminder of the Ham Fest (all clear).

Special thanks to *James Graff, Borough of Fair Lawn,* for the use of the borough's recycling center parking lot and restroom facilities.

How did we do? Your FLARC Ham Fest thoughts and constructive feedback are welcome. You may write the FLARC Board at: board@fairlawnarc.org

Health & Welfare:

- Thoughts and prayers go out to "Skip" KD2BRV and his XYL Maureen who was recently diagnosed with cancer. FLARC wishes Maureen a speedy recovery.
- Carol KD2NMV has been discharged from Christian Healthcare in Wyckoff. Does anyone know how she is doing, moved to, and if she has access to area repeaters?

A motion to close the June business meeting was presented by John W2JLH and seconded by Judith KC2LTM at 8:02 pm.

Respectfully submitted June 6, 2021 by Tom McCabe N2AXX.

Tom